00098372

Digitized with financial assistance from
Shri Brihad Bhartiya Samaj
on 11 March, 2020

PROGRESS IN WOMEN'S EDUCATION

IN THE BRITISH EMPIRE

BEING THE REPORT OF THE

EDUCATION SECTION, VICTORIAN ERA EXHIBITION

1897

EDITED BY

THE COUNTESS OF WARWICK

98372

Vk. l-63

LONGMANS, GREEN, AND CO.
39 PATERNOSTER ROW, LONDON
NEW YORK AND BOMBAY
1898

All rights reserved

NOTE BY SUB-EDITOR

THE collection and arrangement of the papers and speeches which are contained in this volume have led to the conclusion that those who are interested in women's work will seek more definite and practical information on the subjects therein dealt with. As it would be obviously out of place to treat of such matters in the present volume, Lady Warwick has in contemplation the bringing out of a small book of reference, entitled 'Facts for Women,' and indeed frequent reference has been made to it in the following pages. It will give details of an essentially practical nature, such as the length of time required for training in the various professions and businesses, and the cost of study and so forth. Considerable space will be devoted to Lady Warwick's Agricultural Scheme for Women, with particulars of the different branches of Agriculture and Horticulture which are being taken up by women in Great Britain and Ireland. The collection of this information is the direct result of the third sitting of the Education Congress, which is fully reported in these pages. Owing, however, to unforeseen circumstances, it has been found impossible to bring out the 'Facts for Women' just yet, and as it is undesirable to further delay the publication of the present work, the indulgence of the public is asked. The cover of this book has been designed at the Warwick School of Art.

EDITH BRADLEY.

4 CAROLINE PLACE, MECKLENBURGH SQUARE, W.C.
Dec. 1, 1897.

CONTENTS

PAGE

PREFACE. *The Countess of Warwick* xi

INTRODUCTION. *C. W. Kimmins, M.A., D.Sc.* xv

GIRLS' EDUCATION IN JUBILEE YEAR: DESCRIPTIVE CHAPTER ON THE EDUCATION SECTION. *Miss Edith Bradley* . 1

THREE SERIES OF PAPERS READ AT SATURDAY CONFERENCES AND CONGRESS AND DISCUSSIONS DEALING WITH:

I. EDUCATION OF CHILDREN

THE WORK OF THE LONDON SCHOOL BOARD. *Rev. A. W. Jephson, M.A., M.L.S.B.* 27

THE PAUPER CHILD DURING THE REIGN OF QUEEN VICTORIA. *Mrs. S. A. Barnett* 33

EDUCATION IN POOR LAW SCHOOLS. *Miss Lidgett* . . 45

TEACHING OF DEFECTIVE CHILDREN. *Sir Douglas Galton, K.C.B.* 63

TEACHING OF DEFECTIVE CHILDREN. *Mrs. Burgwin* . . 66

THE CHILDREN'S GUILD OF PLAY. *Sister Grace* . . . 73

II. SOME PROFESSIONS OPEN TO WOMEN

PAGE

MEDICAL TRAINING OF WOMEN IN ENGLAND. *Mrs. Garrett Anderson, M.D.* 85

MEDICAL WOMEN IN INDIA. *Mrs. Scharlieb, M.D.* . . 97

THE CARE OF THE SIGHT IN CHILDHOOD AND YOUTH. *Miss Ellaby, M.D.* 107

AGRICULTURAL EDUCATION FOR WOMEN IN GREAT BRITAIN, IRELAND, AND THE COLONIES. *Right Hon. Horace Plunkett, M.P.* 122

THE TRAINING OF WOMEN IN DAIRY WORK AND OTHER OUTDOOR INDUSTRIES. *Lady Georgina Vernon* . . 127

EDUCATION SUITABLE FOR WOMEN IN RURAL DISTRICTS. *Mr. H. Macan.* 139

HORTICULTURE FOR WOMEN. *Miss Hutchings.* . . . 150

IRISH FLOWER FARMS. *Mrs. Orpin* 152

AGRICULTURAL EDUCATION FOR WOMEN IN CANADA. *Professor Robertson* 159

AGRICULTURE FOR WOMEN IN IRELAND. *Professor Teegan.* 166

AGRICULTURE FOR WOMEN IN GREAT BRITAIN. *Major Craigie* 170

AGRICULTURE IN NEW SOUTH WALES. *Miss Windeyer* . . 172

TRAINING OF WOMEN IN BUSINESS. *The Duchess of Sutherland* 175

TRAINING OF WOMEN IN BUSINESS. *Miss Cecil Gradwell* . 176

EDUCATION OF WOMEN FOR BUSINESS. *Miss Janet Hogarth* 190

INDEXING: A PROFESSION FOR WOMEN. *Miss Nancy Bailey* 196

WOMEN AS FACTORY AND SANITARY INSPECTORS. *Miss Anderson.* 203

PAGE

WOMEN AS SANITARY INSPECTORS. *Miss Jessie Gray* . . 229

WOMEN AS FACTORY AND SANITARY INSPECTORS. *Dr. Wynter Blyth* 236

III. EDUCATION IN INDIA AND THE COLONIES: UNIVERSITY EXTENSION

EDUCATION IN INDIA. *Lord Hobhouse, K.C.S.I.* . . . 238

HIGHER EDUCATION OF WOMEN IN INDIA. *Mr. H. M. Birdwood, C.S.I.* 240

FEMALE EDUCATION IN INDIA. *Professor Gokhle* . . 254

EDUCATION OF WOMEN IN INDIA. *Sir William Wedderburn, M.P.* 270

EDUCATION OF WOMEN IN INDIA. *Mrs. Pheroze Thomas* . . 273

EDUCATION OF WOMEN IN INDIA. *Miss Manning* . . . 276

EDUCATION OF WOMEN IN INDIA. *Sir John Jardine*. . . 277

EDUCATION OF WOMEN IN INDIA. *Mr. Das (Bengal Legislative Council)* 280

EDUCATION OF WOMEN IN INDIA. *Mr. Theodore Beck (Allahabad College)* 282

EDUCATION IN THE COLONIES. *Lord Loch* 285

EDUCATION IN CANADA. *The Marquis of Lorne, K.T.* . . 288

HIGHER EDUCATION OF WOMEN IN NEW SOUTH WALES. *Sir William Windeyer, M.A., LL.D.* 295

EDUCATION IN NEW ZEALAND. *Hon. W. P. Reeves* . . . 307

EDUCATION IN SOUTH AFRICA. *Mr. Russell* . . . 320

EDUCATION IN NEW ZEALAND. *The Lord Bishop of Dunedin* 324

EDUCATION IN THE COLONIES. *Sir Philip Magnus* . . . 329

THE ORIGIN AND AIMS OF UNIVERSITY EXTENSION. *Miss J. D. Montgomery* 332

PAGE

ON UNIVERSITY EXTENSION WITH SPECIAL REFERENCE TO WORKING-MEN. *Rev. Hudson Shaw* 337

ON UNIVERSITY EXTENSION. *Professor Tout* . . . 341

ON UNIVERSITY EXTENSION. *R. D. Roberts, M.A., D.Sc.* . 343

ON UNIVERSITY EXTENSION. *Mrs. Henry Fawcett* . . 345

ON UNIVERSITY EXTENSION. *Mr. M. E. Sadler* . . . 347

ON UNIVERSITY EXTENSION. *Dr. Lawrence* 350

ON UNIVERSITY EXTENSION. *Mr. H. J. Mackinder* . . . 351

INDEX 355

ILLUSTRATIONS

PAGE

CHART SHOWING NUMBER OF DEGREES GAINED BY UNIVERSITY OF LONDON WOMEN GRADUATES . *To face* 4

CHART OF SCIENTIFIC DISCOVERIES DURING THE QUEEN'S REIGN—CHELTENHAM COLLEGE. 12

CHART SHOWING PROGRESS (OTHER THAN SCIENTIFIC) DURING THE QUEEN'S REIGN—CHELTENHAM COLLEGE . . . 14

FACSIMILE FROM EXERCISE-BOOK ILLUSTRATING THE ARMSTRONG METHOD OF TEACHING SCIENCE 16, 17

BOTANICAL DRAWINGS FROM CLAPHAM HIGH SCHOOL . . . 18

ILLUSTRATIONS OF THE CHILDREN'S GUILD OF PLAY 73, 79, 81, 83

PREFACE

'Education tells us in what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilise those sources of happiness which Nature supplies—how to use all our faculties to the greatest advantage of ourselves and others—how to live completely. And this being the great thing needful for us to learn, is, by consequence, the great thing which Education has to teach. To prepare us for complete living is the function which Education has to discharge.'—HERBERT SPENCER, *On Education*, Chapter I.

'If there are higher faculties to be exercised than acquisitive and sensual ones—if the pleasures that poetry, and art, and science, and philosophy can bring are of any moment; then it is desirable that the instinctive inclination which every child shows to observe natural beauties, and investigate natural phenomena, should be encouraged.'

Ibid. Chapter II.

AMONGST the multifarious sights of the Jubilee year of our gracious Queen's reign, perhaps none gave greater occasion for thoughtful interest than the 'Women's Work Section' of the Victorian Era Exhibition at Earl's Court; and of these the sub-section 'Education' was a striking object-lesson of a movement essentially belonging to the past sixty years.

In addition to the permanent exhibit in the Education Section, a series of Saturday Conferences and a three days' Education Congress were arranged. The

Conferences dealt with various sides of women's work, professional and educational; the Congress with what might be called the Imperial aspect of Education.

Every Saturday morning papers were read or demonstrations given by women who were experts in the special subjects dealing with some useful branch of women's work which constituted the programme. The lively discussions which followed elicited much useful information. On three long hot summer days the 'Congress' was held, and surely a more interesting and representative assembly of notable men and women—*representative* of all that stands for 'Progress' in the British Isles, in India, and our Colonies—was never gathered before in the Empress Theatre! These papers and discussions have been arranged with much care and thought in the present volume, and I am sending it forth to the public in the hope that such a unique collection will have a widespread interest to all those who are earnestly working out the problems of the century.

To help us to realise the great progress in Woman's Education which has been made during the Queen's reign, we must recall the character of the schools and schoolbooks which were in existence in 1837 and compare it with those in use to-day.

In former days a girls' school was little more than what has been called a 'refined Inquisition.' Developing a verbal memory, teaching vocal and instrumental music and deportment seem to have constituted the greater part of the curriculum of a girl's education at the

beginning of the reign. Since then, the whole purpose of Education has been more fully realised, and the quality of any woman's education is not to be tested by the amount of knowledge which she possesses, but rather by her capability to use that little knowledge which it is in the power of the very least of us to acquire. One sees with rejoicing the ever-widening field which is opening up for women everywhere, giving to all those who possess a trained capacity for work, their opportunity; and it should be remembered that *trained capacity*, wherever it exists, is always in demand. A study of the lives of Miss Clough and Miss Buss shows us how important woman's work and education have become during the present reign, and also how it lies in the power of a woman to teach, and be taught, provided always that there is that fixity of purpose without which no high aim is ever attained in any sphere of life.

Victor Hugo was right when he described the nineteenth century as the 'woman's century.' The advance has been so marked that it has been felt in every department of human effort, but more especially in the realm of Education.

John Knox taught the Scotch people, three hundred years ago, that every scholar made is an addition to the wealth of the community—doubtless he meant 'wealth' in its wider and nobler sense—but it has been reserved for the present age to interpret this truth in its relation to women as well as to men.

We have only now 'to take occasion by the hand, and make the bounds of freedom wider yet.'

The older Universities will in time come into line with the younger seats of learning in the much-discussed matter and burning question of giving degrees to women, and then they will no longer be 'the home of lost causes and forsaken beliefs,' as Matthew Arnold said of his own beloved Oxford.

But perhaps it is just as well that we should proceed step by step and make sure of our ground as we go along.

The Quaker poet Whittier, in writing to Katharine Austin, said: 'I shall be glad to do all in my power to open the doors of Brown University to women,' and he added:

'Of course the world is growing better: the Lord reigns; our old planet is swinging slowly into fuller light. I despair of nothing good. All will come in due time that is really needed. All we have to do is to work—and to wait.'

Let us, then, possess our souls in patience whilst we continue our efforts to place women in their true position in the educational world, and be profoundly thankful for the evidences of veritable progress which have gladdened our hearts during the Victorian Era.

FRANCES EVELYN WARWICK.

WARWICK CASTLE:
Nov. 12, 1897.

INTRODUCTION

THE Educational Congress and conferences held in connection with the Women's Section (Education) of the Victorian Era Exhibition proved so successful, and aroused so much interest, that a permanent record of the proceedings became a necessity. The Countess of Warwick and her committee were singularly fortunate in obtaining well-known experts in the various departments to deal with the more important phases in the progress of women's education during Her Majesty's reign, and it would have been nothing short of a calamity if the valuable papers read at the different meetings had been lost to the literature of so important a subject. The proceedings have not been arranged in chronological order, but have been grouped under appropriate sections which it is hoped may increase the usefulness of this volume and render it more attractive to the general reader.

At the earnest request of many visitors to the Education Section of the Exhibition, a descriptive chapter of the interesting series of educational exhibits has been introduced. The thankless task of writing this chapter

was kindly undertaken by Miss Edith Bradley, who acted throughout as secretary of the Section, and contributed so largely to its success.

The portion devoted to the education of children naturally opens with Mr. Jephson's lecture on the work of the London School Board, which was followed by a most interesting demonstration lesson in needlework to Board School children. The Teaching of Defective Children, the Guild of Play, the vexed question of the Pauper Child during the reign of Queen Victoria, and Education in Poor Law Schools, formed subjects for papers at the Saturday Morning Conferences, and gave rise to useful discussions. Demonstrations were also given on physical exercises in schools and the teaching of experimental science. Limits of space have unfortunately necessitated a considerable condensation of the very interesting discussions which took place after the reading of the various papers.

The papers on the Medical Training of Women in England by Mrs. Garrett Anderson, Medical Women in India by Mrs. Scharlieb, and the Care of the Sight in Childhood and Youth by Miss Ellaby, open up many questions of great interest. Nothing could demonstrate more clearly the rapid strides which have been made of recent years in the education of women than the short sketch given by Mrs. Anderson of the progress in the nature of the teaching and the facilities for hospital practice in connection with medical training. In the medical profession with women, as with men, many are called but few are chosen. Many enter with a light

heart on the most difficult course of training required for any profession, but few ever reach the goal of their ambition. Some fall out of the ranks during the first year's work, and others, after repeated failures, give up all idea of a degree in medicine in the University of London, and seek refuge in the Apothecaries' Hall. To all about to embark on the study of medicine, the sound advice given in Mrs. Anderson's paper should be of great value.

The hopeful view taken of the future of medical work in India by so distinguished an authority as Mrs. Scharlieb is encouraging. The greater facilities offered to native women in connection with the study of medicine and the growth of public opinion in favour of native doctors may lead to a solution of the difficulty. The fact that four or five native workers can be maintained for the same cost as one European worker is in itself a powerful argument in favour of training an efficient staff of native women doctors instead of attempting to supply the needs of India in this respect with such expensive luxuries as highly qualified Europeans. In many cases when Indian princes have endowed hospitals in connection with the Dufferin Fund, special requests have been made for trained native women in preference to medical women trained in England.

That there will always be a demand, and much useful work, for English medical missionaries among the women of India cannot be doubted, but all the evidence is in favour of these being sent to the larger

stations to work in co-operation with, and possibly to direct, the native workers.

Miss Ellaby's paper on the Care of the Sight in Childhood and Youth deals fully with every detail of this important subject, which is receiving so much attention in London at the present time. It is a significant fact that according to the statistics obtained with regard to the sight of children in London Elementary Schools only 7·1 per cent. of those examined had quite normal vision, whereas in a similar examination of children in six schools of the Girls' Public Day School Company, the proportion reached 23·2 per cent. The plea for a systematic examination of the sight of children in schools is in every way a reasonable one.

The meeting of the Congress devoted to Agricultural Education for Women in Great Britain, Ireland, and the Colonies excited an unusual amount of interest. The points raised in the papers were so keenly discussed, that the meeting was prolonged far beyond the allotted time. Mr. Plunkett, in introducing the subject, referred to the interesting report of the Recess Committee appointed to inquire into the status of European countries with a view to the improvement of agricultural methods in Ireland. One of the most important conclusions arrived at was 'that a superior system of education was everywhere the chief agency in economic and social advancement.' This point was further dealt with by Professor Teegan, who gave a description of the graduated system of agricultural education which

has been attended with such excellent results in France. Under this system the child destined for the farm receives his first instruction in subjects applied to agriculture at the primary school. From the primary school he may pass to the higher school, where the instruction is more technical, and thence to one of the agricultural colleges to be found in nearly every Department of France, at which institutions the instruction is practically free. In Lady Georgina Vernon's paper a delightful picture was drawn of lucrative agricultural pursuits open to women. Butter-making, cheese-making, bee-keeping, gardening and poultry-keeping were fully discussed and many serviceable hints given as to methods and the necessary courses of instruction. A valuable contribution was made by Professor Robertson, Dairy Commissioner of Canada, who gave an interesting account of the rise and development of farmers' institutes which have done so much for the agricultural education of men and women in rural districts in Canada. Much attention was given in the discussion to horticulture as a suitable occupation for women, and regret was expressed that there was no State-aided institution in Ireland for the instruction of women in this subject. It is pleasant to learn that as an immediate result of the suggestions made at the Congress, a portion of the suburban residence of the Marlborough Street Training College at Dublin has now been set apart for the instruction of the female Queen's Scholars in practical horticulture. The paper of an old Swanley student who has been

appointed as a female gardener in the Kew Gardens was listened to with much interest.

Considerable difference of opinion was expressed as to the agricultural occupations most suitable for a woman and as to her proper function in a farmer's household. There was also a want of agreement as to the best kind of training, Major Craigie going so far as to suggest the desirability of women receiving a thorough course of instruction in the principles of agriculture to enable them to become the scientific experts of the homesteads.

The conference on Occupations for Women in Business and Indexing was instructive as showing how utterly erroneous were the old-fashioned ideas with regard to the capacity of women for commercial pursuits. It must have been a revelation to many present to hear in how many fields women are successfully holding their own in positions formerly regarded as sacred to men. Great stress was laid upon the value of a good all-round education as the best preparation for positions in business houses, and many were the warnings against early specialisation.

The sitting of the Congress devoted to Education in India was presided over by Lord Hobhouse, who spoke of the success which had attended the fearless policy of the English Government in promoting in every possible way the education of the people of India.

Mr. H. M. Birdwood, in dealing with the Higher Education of Women in India, referred to the success-

ful establishment of the Bombay University and its affiliated colleges and law schools. The Act of Incorporation of the University provides equal facilities for the higher education of men and women, and it is interesting to know that the University numbers among its fellows a woman graduate who is also a member of the Senate. Professor Gokhle drew a graphic picture of the time when his nation 'was the greatest of all on the face of the earth, long before anyone had heard anything of the oldest states of the West,' and gave an account of the efforts now being made to restore to India some of her ancient culture.

The enormous progress in elementary education since the famous despatch of 1854 can be gauged by a comparison of the number of schools and pupils in the Bombay and Madras Presidencies then and now. In the Bombay Presidency at the time of the despatch there were 65 girls' schools attended by 3,500 girls, now there are 900 schools with 84,000 girls in attendance. In the Madras Presidency there were 256 girls' schools, with 8,000 pupils in 1854 as against 1,000 schools attended by 110,000 girls in 1897. But elementary education in India is still in its infancy. At the time of the last census taken in the Bombay Presidency only one female in a hundred and thirty could read and write; and in the Madras Presidency the proportion only reached one in eighty. Sir William Wedderburn, while urging the Government to still greater efforts in promoting the cause of the education of women in India, referred to the special difficulties

which meet the pioneers of educational progress at every step.

Throughout the discussion the valuable work done by the various missionary societies in the establishment of schools and in their hearty co-operation in all matters connected with the advancement of learning was fully recognised.

One of the most pleasing features in the meetings of the Congress was the great interest taken in the proceedings by visitors from the colonies, who frequently took an active part in the discussions. This was especially the case on the afternoon devoted to education in the colonies, when the following papers were contributed: Education in Canada, by the Marquis of Lorne; The Higher Education of Women in New South Wales, by Sir William Windeyer; Education in New Zealand, by the Hon. W. P. Reeves; and Education in Natal, by Mr. Russell.

The well-organised schemes of primary education in the colonies have produced excellent results, as may be evidenced by the fact that in New South Wales only 7 per cent. of the children are unable to read and write, and further, that only 4 per cent. of the people in New Zealand over five years of age are illiterate.

Many points in connection with the administration of primary education are worthy of careful consideration in this country. Prominent among these are the following:

(1) In Canada—the organised inspectorate; the

payment on the results of inspections instead of on the results of examinations; the organisation for securing an adequate staff of visitors for schools; and the scheme for the superannuation of teachers.

(2) In New South Wales—the system of scholarships and bursaries to enable boys and girls to pass from the primary schools to the high schools, and from these to the universities.

(3) In New Zealand—the establishment of a Central Department, with its Minister of Education, exercising control over powerful Local Education Boards, these, again, being aided by school committees responsible for the inspection of each school. The Educational Institute, which is practically a national union of teachers, is recognised by statute, and has considerable influence with the Central Department and the Local Education Boards, to the great advantage of teachers and administrators.

Secondary education, though in a much less satisfactory condition, has made great progress in recent years. In New South Wales, High Schools for Girls have been established by the Legislature, and in New Zealand, secondary schools, though not State-aided, are subject to Government inspection. In all cases adequate arrangements are made for the transference of promising pupils from primary to secondary schools.

In connection with university education the authors of the papers referred with pardonable pride to the more generous treatment of women by the university authorities in the Colonies as compared with their treat-

ment by the ancient universities of the Mother Country. The statement of Sir William Windeyer with regard to the University of New South Wales—'I am glad to think, as a graduate of the University, that neither the resolution of the Senate to grant women the degrees which they had fairly won in open competition with men, nor the Bill proposing to confer on women the full privileges of university membership, was received with any unseemly demonstrations of ignorant prejudice, but with an acclaim of approbation by our Australian undergraduates'—fairly indicates the general attitude in the colonies with regard to the admission of women to university honours.

The interest throughout the conferences and the meetings of the Congress was well maintained, the papers contributed were thoroughly appreciated, and the interchange of opinions between educational experts from all parts of the British Empire was of the greatest value.

All truly interested in educational progress are under a great debt of gratitude to Lady Warwick for the great service she has rendered to the cause of the higher education of women.

C. W. KIMMINS.

PROGRESS IN WOMEN'S EDUCATION

IN

THE BRITISH EMPIRE

GIRLS' EDUCATION IN JUBILEE YEAR

A Descriptive Chapter on the Education Section

Miss Edith Bradley

To exhibit 'Education' at all is by no means an easy task, but when to the initial difficulties a 'time limit' is further applied a really satisfactory result is rendered impossible.

Thus, when the Countess of Warwick undertook the chairmanship of this very important section of the Exhibition, late in the January of this year, she knew it would be out of the question to collect, by the beginning of May, exhibits from all parts of the United Kingdom which, when put together, could be called a comprehensive whole. It could at best only be typical.

Seeing that women's work generally was receiving

NOTE.—Frequent reference will be made in this chapter to the *Handbook to Education Section*, edited by the Countess of Warwick, which contains an account of the colleges and brief memoirs of the leading educators &c. Published by Edward Arnold.

a large amount of attention, it was obviously desirable that an attempt should be made, for the first time in this country, to place before the public in tangible object lessons the particular point reached by girls' education in England in Jubilee year. Having got together this collection, at great expenditure of time and effort, Lady Warwick decided that it should not be dispersed until it was embodied in some permanent record; hence the reason of this chapter. As it aims at being purely descriptive, criticism is carefully avoided. The arrangement will be the same as that followed throughout this Section, namely, to commence with the Universities and work downwards through University Colleges, University Extension, the School of Medicine, Training Colleges, Secondary Schools, Technical Work, Polytechnics, Kindergarten, Physical Education, the Teachers' Guild, National Home Reading Union and Parents' National Education Union, to Primary Education as represented by the School Board for London.

The Universities.—On entering the Section, the eye is at once attracted to a large panel on which are hung some very fine portraits in oils of noted educators, not unfortunately those from Girton [1] and Newnham.[2] The former is represented by a water-colour sketch of the college by the architect, Mr. A. Waterhouse, R.A., and some photographs of dining-hall, library, and students' rooms. The latter by photographs of the celebrated Shannon portraits of Miss A. J. Clough,[2] Mrs. Henry Sidgwick,[3] and Miss M. G. Kennedy,[4] of the different halls which constitute the college, students' rooms, and the beautiful bronze gates erected by the students in memory of their first Principal, Miss A. J. Clough.

[1] *Handbook to Education Section*, p. 65.
[2] *Ibid.* p. 68.
[3] *Ibid.* p. 69.
[4] *Ibid.* p. 70.

A very fine bronze medallion of Mrs. Somerville,[1] lent by Somerville College,[2] also a portrait in oils of Miss Shaw-Lefevre, its first Principal, by Jacomb Hood, and a portrait of Miss Cornelia Sorabji, B.A., LL.D.,[3] one of its most distinguished students; another of Miss E. E. Smith,[4] an active supporter of Somerville. Photographs of the college, groups of students and their rooms, complete the contribution from Somerville as a separate college, though the work done by the men and women represented in the interesting sets of photos lent by the Association for Promoting the Education of Women in Oxford [5] include Somerville as well as Lady Margaret Hall.

To the efforts of this active association is due the collection of a valuable historic exhibit connected with the Oxford University. First is a portrait of the Rev E. S. Talbot,[6] late Warden of Keble, now Bishop of Rochester, who took a leading part in the founding of Lady Margaret Hall, and is still its Warden. Then there are sets of photos, to which allusion has already been made, which include amongst the founders, officers, and benefactors of Lady Margaret Hall, such names as Canon Scott Holland, the present Dean of Christ Church, the Bishop of Lincoln, Lord Herschell, Canon Ince, Mrs. Arnold Toynbee, Mrs. A. J. Johnson, Hon. Mrs. Talbot, Professor and Mrs. T. H. Green, Dean Bradley, Dr. Kitchin, Rector of Exeter, Professor and Miss Thorold Rogers, and Mrs. Humphry Ward.

A water-colour drawing by Miss A. M. Todd, of Clarendon Building, shows the room lent to the association by the Vice-Chancellor as an office. There are,

[1] *Handbook*, p. 74. [2] *Ibid.* p. 72. [3] *Ibid.* p. 75.
[4] *Ibid.* p. 79. [5] *Ibid.* p. 80. [6] *Ibid.* p. 77.

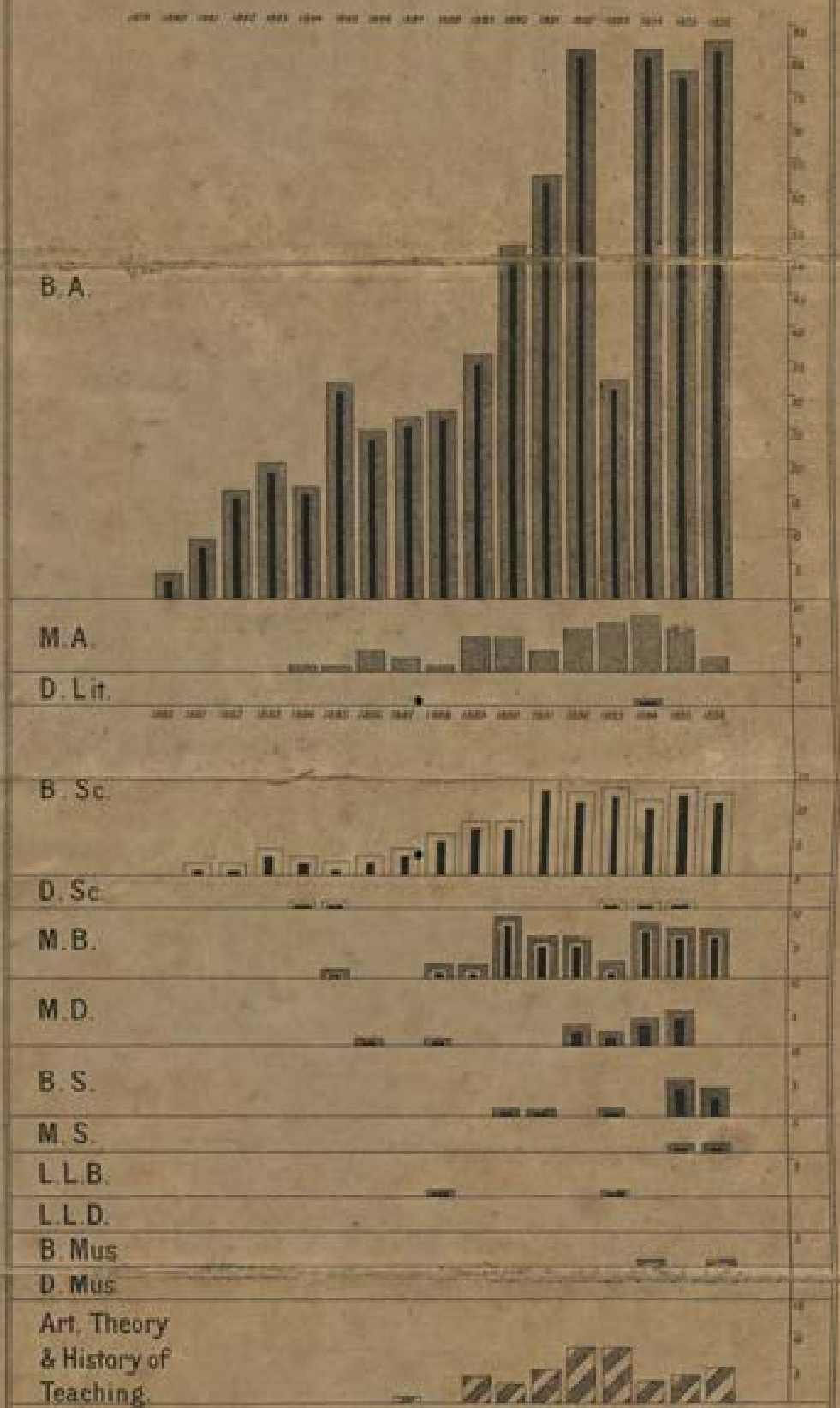
besides, photographs of Lady Margaret Hall,[1] the old hall and new wing, and the college chapel, which is a distinctive feature, with its recumbent effigy of Henry VII.'s mother, the Lady Margaret Tudor. Lastly, the original portrait of Miss Wordsworth[2] by J. J. Shannon helps to make the Oxford exhibit more complete than that from the sister University.

With reference to the Welsh Universities, they are at present so young that they can hardly be represented, though Aberystwyth and Cardiff sent photographs of Alexandra[3] and Aberdare[4] Halls and also of groups of students. The latter lent a portrait in oils of its first and only president, the Dowager Lady Aberdare[4] by J. B. Haycraft.

University Colleges.—Queen's College[5] comes first in order of foundation (1848). By its foundation the whole question of the higher education of women was set on foot. With its opening and early years are associated the names of most of the leading progressive men and women of the early part of the reign. It is the loan of their portraits which constitutes the exhibit from Queen's College. A large oil painting of the Founder and first Principal, Frederick Denison Maurice,[6] by Lewis Dickinson, occupies a place of honour in the centre panel of the Section. A likeness in pastels of the Rev. T. A. Cock, the Bursar (1848 to 1885), by Miss Cusins, hangs near, whilst opposite are portraits of the Rev. E. H. Plumptre, Dean and Principal of the College, and the Rev. C. G. Nicolay, co-Founder with the Rev. F. D. Maurice; whilst two frames contain cabinet photos of Archbishop Trench, Dean Stanley, Hullah, Richmond, Sterndale Bennett, Llewellyn Davies, and Canon

[1] *Handbook to Education Section*, p. 75. [2] *Ibid.* p. 77.
[3] *Ibid.* p. 97. [4] *Ibid.* p. 99. [5] *Ibid.* p. 87. [6] *Ibid.* p. 88.

University of London
WOMEN GRADUATES



April, 1911

Reproduced from Bedford College

C. F. ROLL LITHO. 6 TURNMILL ST. HOLBORN E.C.

Elwyn. A silver medal gained in Paris by a former pupil, Mrs. Bovell Sturge, who was one of the first women doctors, is lent by Queen's College.

Bedford College,[1] founded 1849 (one year later than Queen's), had also for its object the promotion of the higher education of women. Its foundation was due to the munificence and foresight of Mrs. Reid,[2] who contributed 1,500*l.* to start the college, the management of which was placed largely in the hands of lady visitors. A valuable contribution to the Exhibition, educationally historic, is made by Bedford College in the form of photographs—e.g. Mrs. Reid and her original council; 'Visitors,' including Erasmus Darwin, the Rev. Mark Pattison, Professor Story Maskelyne, Miss Jane Martineau, Lady Belcher, Lady Pollock, Mrs. Henry Busk, Miss Julia Smith, Mr. Hensleigh Wedgwood, and others. Oil paintings of Miss Anna Swanwick[3] by Miss K. Bruce, and Mme. Bodichon[4] by Samuel Lawrence, also views of the college and its laboratories, and two charts, one of Great Educators, the other, drawn by Miss Henrietta Busk,[5] shows the number of degrees gained by women at the London University. It is curious to notice that, with the exception of the B.A. degree, the numbers have decreased since 1894 and 1895, if not previously; see diagram of Women Graduates.

In a glass case there are bacteriological preparations, a small lay figure dressed in a complete ancient Greek costume made at Bedford College, and an autograph album containing the signatures to the memorial presented in 1877 to the Senate of the London

[1] *Handbook*, p. 80.
[2] *Ibid.* p. 82.
[3] *Ibid.* p. 85.
[4] *Ibid.* p. 86.
[5] Miss H. Busk was a former student of Bedford College.

University in favour of the admission of women to Medical Degrees. On one page the following significant names occur: Miss Emily Davies, Dean Bradley, Mr. John Morley, Professor Sayce, Dr. Martineau, Mr. Hensleigh Wedgwood, Rev. Canon Basil Wilberforce, Miss Frances Power Cobbe, Miss Lydia Becker, Professor James Stuart, Lady Stanley of Alderley, and others.

College Hall.—Two oil paintings, of Professor Samuel Morley (one of the founders, and Chairman of the Council until his death) and Miss Grove, the Principal, are lent by the Council of College Hall;[1] also some photos of the buildings, and of distinguished students, such as Miss Brodrick, Ph.D., Miss Cooke, Surgeon to the Queen Dowager of Corea; Rukhmabai, M.D., first Medical Officer at Cama Hospital; and Miss Clara Collett.

Cheltenham Ladies' College.[2]—The exhibits from Cheltenham will be considered under the Schools (p. 11) and Training Colleges (p. 8), reference only being made here to the magnificent college buildings, of which Cheltenham is so justly proud. Photographs both of exteriors and interiors illustrate this point. An excellent portrait of the Principal, Miss Dorothea Beale,[3] by Mrs. Lea Merritt, occupies a place amongst the oil paintings, which form such an important and valuable part of this Section.

[1] Through an oversight no mention was made, in the *Handbook to the Education Section*, of College Hall, Byng Place. It was founded in 1882 and incorporated under the Board of Trade 1886 as a Hall of Residence for women who are studying at University College and at the School of Medicine for Women. It is important to note that in 1878 University College threw open all its classes (except those of the Faculty of Medicine) on equal terms to women as well as men.—Sub-Ed.

[2] *Handbook*, p. 90. [3] *Ibid.* p. 91.

The Royal Holloway College[1] is represented only by a drawing of its Principal, Miss Bishop.[2]

Westfield College[3] contributes photographs of students' and college rooms, of the Principal, Miss Maynard,[4] and of members of the staff and distinguished students.

University Extension.[5]—The diagrams in this exhibit are undoubtedly the finest shown in the Section; they demonstrate:

(*a*) The attendance at lectures in England, (it is a matter of regret that, all too clearly, the falling off in this direction since 1891–92 is thus depicted).[6]

(*b*) The number of courses.

(*c*) Number of certificates awarded.

(*d*) Table of statistics.

There are also specimens of syllabuses and certificates, and a box containing a travelling library used by the Oxford delegacy. This exhibit is lent by the joint Boards of Oxford, Cambridge, London, and Victoria.

The London School of Medicine for Women.[7]—The medical profession is now such an important field of work for women, it is to be regretted that only the London School should have responded to the invitation to be represented. Their contribution is most valuable, and includes water-colour drawings of the Medical

[1] *Handbook*, p. 94. [2] *Ibid.* p. 96. [3] *Ibid.* p. 93.
[4] *Ibid.* p. 94. [5] *Ibid.* p. 162.

[6] A footnote to each diagram attributes the sudden great rise in 1890–91 and 1891-92 to the engagement of University Extension Lecturers by County Councils, prior to the appointment of permanent lecturers. It was hoped that a number of diagrams would be forwarded by the various educational bodies, to illustrate their work, which can thus be shown in such a forcible way. The value of diagrammatic teaching was fully demonstrated at the Chicago Exhibition. Probably their absence at Earl's Court was due to the 'time limit' already mentioned. SUB-ED.

[7] *Handbook*, p. 159.

Institute and vestibule of the new Hospital for Women, also a pen-and-ink sketch of exterior. Photographs of wards, quadrangle and exterior of the Royal Free Hospital, Cama Hospital, Bombay, and groups of students. A marble bust of Mrs. Garrett Anderson, M.D., by Miss Susan Durrant, a portrait of Dr. Anstie, first Dean of the London School of Medicine for Women, and elevation and ground plan of the new buildings now being erected by the school, as its present premises are altogether inadequate.

Training Colleges.—In an article in the 'Handbook' on 'Training Colleges for Secondary Teachers,'[1] contributed by Miss Hughes, she says that 'the establishment of Secondary Training Colleges is one of the most interesting developments of our Queen's reign,' and, further, that 'it has a special interest as the one educational development in which women have led the way.' It is satisfactory, therefore, to note that both the Maria Grey and Cambridge Training Colleges send excellent work to the Section, and that this branch of Cheltenham and Bedford Colleges is also represented: the former by a chart of great educators, from ancient to modern times, arranged chronologically and according to school of thought, e.g. Philosophers (ancient), Humanists, Realists, Naturalists and Philosophers (modern); and the latter by brown-paper work, i.e. drawings on brown paper, done by teachers to illustrate the lessons they are giving.

The Maria Grey Training College.[2]—Amongst the specimens of work done by the students, for the benefit of their pupils, nothing shows more dexterity, skill and accuracy than the enlarged model of a water lily coloured to imitate nature, and executed in some plastic

[1] *Handbook*, p. 129. [2] *Ibid.* p. 137.

material, the secret of which is not divulged. A separate model of the pistil is shown to illustrate the process of fertilisation. Each petal of the lily is moulded on to a wire, which can be fixed into the calyx at will. The whole forms a novel invention, capable of expansion in many useful directions. Physical and home geography and natural science lessons are illustrated by rapid sketches and models, such as 'Winchelsea' and 'The Fungi at Home.' The portfolios contain specimens of good brush work, notably the studies of trees.

In connection also with this college may be mentioned the excellent likeness of Mrs. William Grey, its founder, and also a valuable water-colour of Mrs. Grey and her sister, the late Miss Shirreff, painted when they were girls by A. G. Challoner, R.A. In spite of her eighty-one years Mrs. Grey wrote the short biographical notice of herself and her sister for the 'Handbook.'[1] There is also a portrait of Miss Agnes Ward,[2] Principal of the College 1880 to 1892, by William Carter.

Cambridge Training College.—Some striking examples of rapid sketches to illustrate lessons are given by the Cambridge Training College; for instance, a head of Napoleon, drawn from memory in four minutes and a half, and a fine stork painted in oils on blue American cloth, finished in thirty-five minutes. These sketches on a variety of subjects can thus be made to produce a great effect with little effort. Perhaps, however, the most valuable contribution is the complete set of papers indicating the work of the students. These are contained in about a dozen volumes in strong and uniform binding, which being placed on a table are easy of access. The 'Notes on Lessons,' 'Psychological

[1] *Handbook*, p. 112. [2] *Ibid.* p. 138.

Observations of Children' by the students, and 'Experiments in Teaching' must have furnished those teachers, who have taken the opportunity of studying them, with much information and new fields of thought.

A portrait of Miss E. P. Hughes,[1] the well-known Principal of the Training College, hangs between Miss Benson [2] and Miss Bishop.

Schools.—The North London Collegiate School for Girls.[3]—Foremost amongst secondary schools must come the North London, founded in 1850 by Miss Frances Mary Buss,[4] the great pioneer of this branch of education. Her portrait in oils by Ida S. Perrin hangs amongst the other educators, and a large framed photograph forms the centre around which are grouped exhibits from the school which is a lasting memorial of her life-work. Near at hand is an excellent but very small photograph of Mrs. Bryant,[5] the present head mistress. A pen-and-ink sketch of Clothworkers' Hall[6] points to the active interest taken by that Company in this school. A useful diagram shows the development of the connection between the Universities and the North London School, from the experimental opening of the Cambridge Local Examinations to the present time. Two history charts, the work of the pupils, are also good, one being commended by the Royal Drawing Society.[7] A case in front of the exhibit contains a school album from 1850–73, with photographs (some sadly faded) and early records of the school; biological diagrams; botanical specimens, and paper models.

Association of Head Mistresses.—A photographic group of this important body, taken at Uppingham

[1] *Handbook*, p. 135. [2] *Ibid.* p. 115.
[3] *Ibid.* p. 101. [4] *Ibid.* p. 105. [5] *Ibid.* p. 107.
[6] *Ibid.* p. 102. [7] *Facts for Women.*

1887, hangs close by. It is interesting as containing portraits of Mr. Thring, Miss Buss, Miss Beale, Miss A. J. Cooper[1] (by whom it was lent), and others. A portrait in chalks of Miss A. J. Cooper comes from the Edgbaston High School.

Cheltenham College School.—Seeing the reputation for educational charts and diagrams which Cheltenham has established for itself, it is obvious that an exhibit from this school would be incomplete without some of these. We therefore find three occupying the space, two different methods of illustration being employed. The first is a chart of the Christian Era, showing the chief contemporary events of the nineteen centuries: each century is represented by 100 small squares, and each is coloured according to the periods of English history; events are represented by symbols, which are explained in a key attached. The other two are pictorial charts of the Queen's reign, one showing the scientific discoveries and progress of the sixty years (see facsimile, p. 12), the second the chief events other than scientific; each fact is represented by cleverly drawn pen-and-ink miniatures, and is further explained by a key (see facsimile, p. 14).

The Girls' Public Day School Company.[2]—The exhibit from the Company's High Schools gives a splendid object lesson of what can be done by organisation, for secondary teaching as well as other things. In the selection of objects from the various schools the aim seems to have been rather to represent as fully as possible the general scope of the work, and the methods employed in teaching the various branches of the school course, than to exhibit specimens of the highest standard attained by individual pupils. To give an

[1] *Handbook*, p. 114. [2] *Ibid.* p. 109.

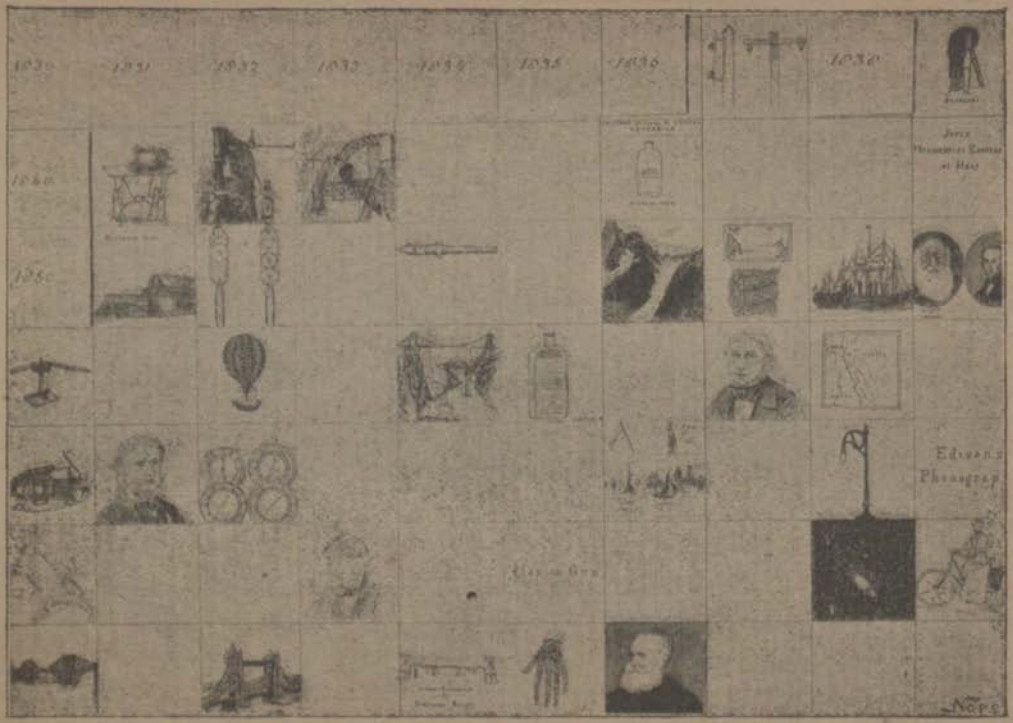


Chart of Scientific Discoveries during the Queen's reign—Cheltenham College.

These Charts are constructed according to the Méthode Mnémonique Polonaise (Student's Chron. Maps : Bell & Son). Each line represents a decade—the key is subjoined.

adequate description of the work, which occupies four cases and a very large amount of wall space, is quite impossible, and it must suffice to mention some of the most striking objects; but the ability and high average of work displayed, as well as the continuity of arrangement, are very marked. Mention should here be made of the excellent portrait, by J. J. Shannon, of Miss H. M. Jones,[1] Head Mistress of the Notting Hill High School, which hangs with the other oil paintings in the centre panel. There are also portraits of the late Lady Stanley of Alderley,[2] who took such an active interest in the work of this Company, and of the late Miss Benson (Mrs. McDowall), first Head Mistress of the Oxford High School.

The Wimbledon High School has furnished one large case with apparatus illustrating some of the experiments in physics and chemistry, showing the Armstrong method of teaching science, now adopted in many of the Company's schools. By this method children are taught to deduce facts for themselves from

[1] *Handbook*, p. 113. [2] *Ibid.* p. 66.

KEY TO CHART SHOWING PROGRESS IN SCIENCE DURING THE QUEEN'S REIGN.

1837. First Telegraph. 1839. Photography, Daguerre.
1841. Sewing Machine. 1842. Nasmyth's Steam Hammer. 1843. Ross's Telescope. 1848. Planet Neptune discovered—Anæsthetics.
1849. Joule's 'Mechanical Equivalent of Heat.'
1851. The Great Exhibition. 1852. Ophthalmoscope. 1854. Armstrong Gun. 1856. Tyndall's Investigation of Glaciers. 1857. Atlantic Cable from Valencia to Newfoundland. 1858. The Great Eastern. 1859. 'Origin of Species,' Darwin —Brunel's Death.
1860. Stellar Spectroscopy, Huggins. 1861. Aëronautic Experiments.
1864. Clifton Suspension Bridge. 1865. Lister, Antiseptic Treatment.
1867. Death of Faraday. 1868. Suez Canal.
1870. Torpedo. 1871. Huxley, 'Anatomy of Vertebrates.' 1872. Daily Weather Chart first begun. 1876. *Challenger* at Portsmouth—Bell's Telephone. 1878. Electric Light on the Embankment.
1879. Phonograph.
1880. Pasteur's Cure of Hydrophobia. 1883. Sir W. Siemens' Steel Process. 1885. Maxim Gun. 1888. Stellar Photography, Sir Isaac Roberts. 1889. Bicycles—The Pneumatic Tyre.
1890. Forth Bridge. 1892. Tower Bridge. 1894. Argon by Lord Rayleigh and Professor Ramsay. 1895. Röntgen Rays. 1896. Lord Kelvin's Jubilee.

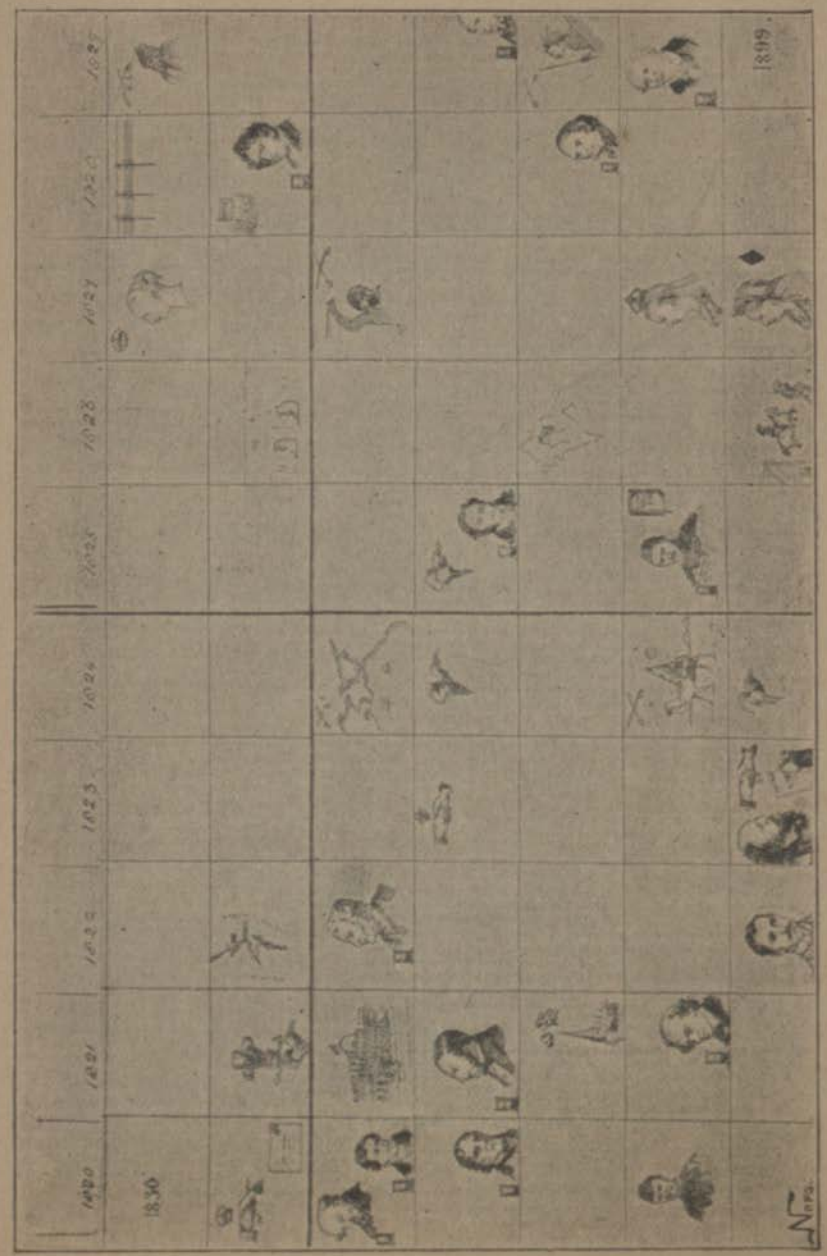


Chart showing progress (other than scientific) during the Queen's reign—Cheltenham College.

experiments; they commence with measurements and weights. A fascinating set of weights (metric system) occupies a prominent place amongst glass tubes and bottles and flasks, and suchlike things which delight the heart of the embryo chemist—until an explosion has moderated his ardour. The accompanying diagram (pp. 16, 17) is an illustration of this method. From this school also there are books of written work by pupils, and a case of diagrams to further illustrate the teaching of Elementary Physics and Chemistry.

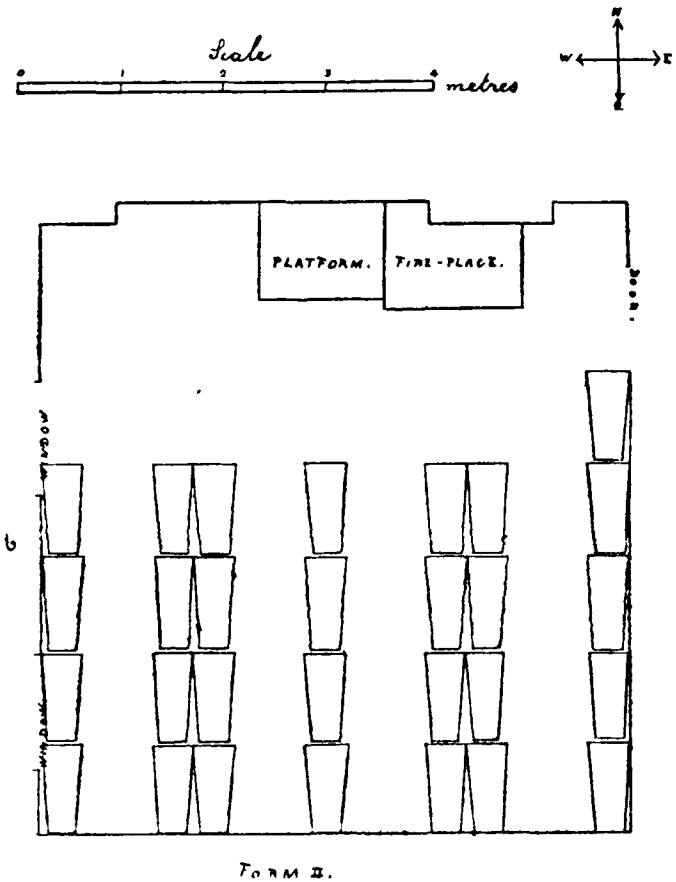
Sutton High School contributes scientific apparatus and instruments used in the weather observations, made by the pupils.

Kensington High School.—An interesting scheme of teaching music is demonstrated in another large case. It is called 'The Letterless Method,' and was invented by Miss Mary Louisa White, a music teacher in the Kensington High School. It aims at 'applying Kindergarten principles to the music teaching of beginners; to help young minds to realise distances, time, form and the meaning of signs; and to save children from much of the drudgery which too often attends early efforts to "play."' The Letterless method is used

---

CHART OF THE NINETEENTH CENTURY OF THE CHRISTIAN ERA.

1837. The Queen's Accession. 1838. First Electric Telegraph. 1839. First Afghan War.
1840. Queen's Marriage. Penny Postage. 1841. Birth of the Prince of Wales. 1842. Capture of Shanghai. 1846. Repeal of the Corn Laws. 1848. Death of Lord Melbourne. Chartist Revolt.
1850. Death of Wordsworth and Sir Robert Peel. 1851. First Great Exhibition. 1852 Death of the Duke of Wellington. 1854. Crimean War. 1857. Indian Mutiny.
1860. Death of Lord Aberdeen. 1861. Death of the Prince Consort. 1863. Prince of Wales' Marriage. 1864. Birth of the Duke of Clarence. 1865. Birth of the Duke of York. Death of Lord Palmerston. 1869. Death of Lord Derby.
1871. Disestablishment of the Irish Church. 1876. Queen proclaimed Empress of India. 1878. Death of Lord John Russell. 1879. Zulu War.
1880. Lord Roberts' Relief of Candahar. 1881. Death of Lord Beaconsfield. 1884. Soudan War. 1885. Death of Gordon. Bible Revised. 1887. Queen's Jubilee. 1889. Death of Browning.
1892. Death of Duke of Clarence. 1893. Marriage of Duke of York—Death of Tennyson. Home Rule Bill rejected. 1894. Birth of Prince Edward. 1896. Jameson's Raid. 1897. Queen's Diamond Jubilee.



Facsimile of a page in the exercise-book of a child in Form II. of the South Hampstead High School, showing some of the work done in that school in a course of practical lessons on the measurement of Length and Area, intended to lead up to the teaching of Science on the 'Armstrong Method.'

25th Feb 1897.

1 Find the length in metres from the N E corner to the S.W corner of Form II

2 How many sq m. of carpet would be required for Form II.

3 Find the length in metres of the wall between the windows

P 1 Length from N.E corner to S.W. corner of Form =
= 8·25 metres.

2 Length of room .. .. = 6 metres.
Width of room ..... = 5·7 metres
∴ Length × Width .. .... = 6 × 5·7 $\frac{39}{1}$ metres
∴ area of the room .... = 34·2 sq metres

R. $\frac{5·7}{6}$
$\underline{34·2}$ sq metres
Answer 34·2 sq metres carpet

3 Length of the wall between the windows
R = 1·55 metres

$\frac{5}{6}$ ∴ Length × Width = 6 × 5·7 sq metres.

QUERCUS PEDUNCULATA OAK
ORDER- CUPULIFERÆ
A
B
C
D
E
F
G
H
K
L
M

Name . . . *Quercus pedunculata* . . . *Common Oak*

A. Whole branch, showing staminate and pistillate inflorescences.
   a. Staminate inflorescence.
   b. Pistillate inflorescence.

B. Single pistillate flower, showing bracts and stigmas.

C. Vertical section through pistillate flower.
   a. Bracts to form cupule.
   b. Perianth.
   c. Stigma.
   d. Ovule.

D. Three staminate flowers.
   a. Perianth (five segments).
   b. Stamens.

E. Ripe fruit. Acorns.
   a. Cupule.
   b. Remains of stigma.

F. Germinating acorn.
   a. Primary root.
   b. Shoot.

G. Seed.
   a. Micropyle.

H. Vertical section through seed.
   a. Radicle.
   b. Plumule.
   c. Cotyledon.

K. *Spangle oak galls* on leaf.
   a. Produced by Neuroterus lanuginosus.
   b. Produced by Neuroterus numismatis.
   c. Produced by Neuroterus fumipennis.
   d. Produced by Spathegaster tricolor.

L. *Solid oak galls* produced by Cynips Kollari.

M. *Leafy bud gall* produced by Aphilothrix gemmæ.

ORDER	*CUPULIFERÆ*
SUB-CLASS	*INCOMPLETÆ*
CLASS	*DICOTYLEDON*
DIVISION	*ANGIOSPERM*
GROUP	*PHANEROGAM*

in the Kensington High School and in the Kindergarten Department of the Sheffield High School.

Kensington also sends several volumes of pupils' work in History and Geography, English Language, Grammar, German, Mathematics, Arithmetic, Greek, Latin, and Literature. In this last are essays on 'The Study of the Florentine Republic, supplemented by Mrs. Oliphant's "Makers of Florence" and Armstrong's "Lorenzo di Medici," illustrated with maps and photographs.' These volumes may be taken as valuable and suggestive examples of the work in the school.

Highbury High School sends specimens (beautifully executed) of all the work required in the different grades of the course prescribed by the London Institute of Needlework.[1] They are admirably mounted and arranged.

Shrewsbury High School sends some excellent brush-work, drawings, and a design for book cover, for which the Royal Drawing Society[2] awarded a silver star, as it did also to the *Nottingham High School* for original design. The Ablett system of teaching drawing, as followed in the Company's schools, is well exemplified.

From *Clapham High School* come exceptionally good botanical drawings (see plate, p. 18); Kindergarten brush-work by children of seven and eight years of age, and very good models to illustrate Nature (coloured), in clay, by children of the same age. In the Company's Schools great attention appears to be paid to careful and artistic arrangement and mounting of all work. This is a point worthy of the consideration of private schools. The teaching of geography is represented by excellent relief maps sent from Black-

[1] *Facts for Women.* [2] *Ibid.*

heath High School, the work of the pupils themselves —and by sketch maps from Highbury.

Sheffield High School.—This school furnishes specimen notice boards and time tables, and, what is specially interesting, a page from the 'Physical Record Book' in use. The child on entering is examined by a lady doctor attached to the school, and particulars of sight, hearing, throat, breathing, lungs, heart, chest and waist measurements are recorded, with any observations considered necessary. This examination is repeated once or twice a year, with the result that the physical condition of the pupils is kept well in view (see diagram, p. 22).

Sheffield also sends a Scheme of Work, and books showing the work of each class throughout the school, in Mathematics, Science (illustrations especially good), Languages and Literature.

Maida Vale and East Liverpool High Schools.—Each sends five or six bound sets of answers to examination papers. These are not selected, but represent the average work done, and as such are valuable records.

Before closing these notes on the work of the G.P.D.S. Company, attention should be drawn to the Tennis Challenge Shield and Hockey Cup competed for by the Metropolitan Schools of the Company, and the Silver Swimming Challenge Shield from Sheffield, all of which indicate the care that is bestowed on physical training.

Manchester,[1] *Macclesfield and Tottenham*[2] *High Schools* also send contributions, in the form of photographs of the school buildings from the first named; from Macclesfield a case to illustrate the different

[1] *Handbook*, p. 116.

[2] These three schools do not belong to the G.P.D.S.C.

SHEFFIELD HIGH SCHOOL

PHYSICAL RECORD

NAME, C. .. ..M.. . . No.

ENTERED SCHOOL, January 1896. LEFT SCHOOL . ..

		Date	Date	Date
Age . . .		Jan. 30, '96 12	Sept. 18, '96 13	Jan. 13, '97
Height . . .		4 ft. 7 in.	4 ft. 8½ in.	4 ft. 9 in.
Weight . . .		5 st. 3 lbs.	5 st. 9 lbs.	5 st. 10 lbs.
Sight . .	Right	$\frac{5}{10}$ enl. at 5″ p.r.		
	Left	ditto		
	Colours	Normal		
	Glasses	Are required for *Myopia*	Is wearing them	
Hearing .	Right	Normal		
	Left	Normal		
Throat, &c. . .		Tonsils slightly enlarged	As before	
Breathing . .		Nasal, free		
Lungs . . .		In r. lung traces of previous illness	Normal	
Heart . . .		Normal	Normal	
Chest Measure .		26	28¾	29
Waist Measure .		22	24½	24½
„ „ (over stays)		22½		
Chest Formation .		Very flat	Much wider: still rather flat	
Spine . . .		Decided lat. curve, L.	Curve less	Curve scarcely perceptible
Muscles. . .		Fair	Very good	
Arch of Foot . .		Pretty good	Good	
Development . .		Fair height for age		
Remarks . .		Clothes too tight	Clothing is quite free Has had daily treatment for five months Health *very* much better	General carriage much improved
Advice .		Daily private treatment by Miss Belfrage for spine Clothes looser To see me in three months Consult an oculist Sit near board	To continue daily exercises	To leave off special exercises, and have ordinary school gymnastics Still sit near board

HELEN M. WILSON, M.D. Lond. HELEN M. WILSON, M.D.

stages in silk manufacture, five volumes of pressed wild flowers (so well mounted that the constant handling which these books have received has failed to dislodge more than a few flowers), and a box containing a collection of 138 botanical specimens, also thoroughly well done. From Tottenham some exquisite needlework, maps, and original designs for book covers.

St. Margaret's Clergy Orphan School at Bushey exhibits yet another branch of educational work—botanical drawings from nature,[1] and from under the microscope. The execution and minute detail of these are remarkably clever, as is testified by the fact that one sheet of zoological drawings, by a pupil of thirteen, gained the Gold Star of the Clothworkers' Company, and another of Venus's flower basket, by a pupil of fourteen, the Bronze Star of the Royal Drawing Society.[2]

St. Katherine's School, St. Andrews.[3]—The only contribution to the Education Section from Scotland comes from this school. It consists of a complete exhibit of handwork from the Kindergarten to the Lower Fourth Form, commencing from mat-weaving and basket work to doll's furniture (cardboard work), netting, carpentry (a table and deck chair of usable proportions), and excellent specimens of bookbinding in various stages.

Technical Work[4] is fairly represented. The Liverpool Technical College for Women illustrates the development of domestic science education for girls, by a series of photographs and illustration papers, framed as one picture of large dimensions. A second framed picture shows classes of seamen learning cookery.

A case from the *Borough Polytechnic* contains

[1] Similar drawings were accepted by Her Majesty in 1896.
[2] *Facts for Women.* [3] *Handbook*, p. 116. [4] *Ibid.* p. 150.

ladies' tailoring and mantle-making by dressmakers and apprentices, including miniature costumes of remarkable accuracy, laundry work, boot and shoe manufacture, art work, original design for Majolica plates, cast from head modelled in clay, geometrical and mechanical drawings.

The Nottingham Technical School for Women sends specimens of dressmaking and sewing, millinery and laundry.

For novelty of arrangement, however, and scrupulous adherence to the reproduction of minutest details in miniature, *Miss Prince Brown's* model of a present day technical class room stands unrivalled. It is so faithfully carried out, that it is a matter of regret it did not occupy some really conspicuous place outside the Education Section, where it could have been seen to much greater advantage by the daily frequenters of the Exhibition who never fail to crowd themselves into the corner where it stands. The walls of this 'room' are papered and hung with pictures, a carved fireplace and overmantel taking up a good proportion of space. Dolls, all beautifully dressed, sit or stand about in various attitudes, a bride, a widow, morning and afternoon callers are all there, one of the latter in full outdoor attire is ironing, and another is cutting out a dress. The 'room' is completely furnished with carpets and hangings, tea cups and saucers and a kitchen range, besides other things too numerous to mention.

The Kindergarten Room[1] is a small one opening out of the large gallery, and the Froebel Society of Great Britain and Ireland undertook its arrangement, as a 'Model Kindergarten Room.' Diminutive forms and a chequered table occupy the centre, with three extra

[1] *Handbook* p.1 39.

large Windsor chairs, blackboard and easel. These are curiously suggestive of the disproportion in size between teachers and taught! Around the walls, under glass, are specimens of work by the children of the various schools belonging to the Society, whilst a higher line is occupied by the work of students from the Cheltenham College and Maria Grey Kindergartens, the illustrations of a story (the 'Jungle Book') and of a lesson (on the silkworm) from the latter being distinctly original and good. In a glass case are good examples of clay modelling from Norland Place School; cardboard models from Stockwell; cane-weaving and other things from the Froebel Institute. Portraits of Pestalozzi and the late Miss Shirreff and a medallion portrait of Frederick Froebel dominate the exhibit which is the outcome of their teaching.

Physical Training,[1] *the Teachers' Guild*,[2] *the National Home Reading Union*,[3] *and Parents' National Education Union*[4] are all represented in the Education Section, but space does not admit of detailed notice.

Type-writing is shown in a new and interesting way in the framed exhibit of Miss Gradwell's School of Business,[5] in the form of an indenture, a balance sheet, estate accounts, and syllabus of the lectures given in the course of training.

Mr. Edward Arnold shows a number of beautiful *Illustrations for Object Lessons* in schools, many of which are designed by women.

Last in order, though perhaps first in importance, comes *Primary Education* as represented by the School Board for London.[6] In looking at the work sent by the

[1] *Handbook*, p. 165. [2] *Ibid.* pp. 167, 168. [3] *Ibid.* p. 171.
[4] *Ibid.* p. 170. [5] *Progress in Education*, p. 187. *Facts for Women*.
[6] *Handbook*, p. 117.

Board no impartial observer can fail to be struck with the fact that compulsory education has had a humanising effect upon the vast multitude of children who throng our streets and alleys, and who are daily growing up to become the future citizens of the vast Metropolis. The excellent exhibit of needlework and knitting (essentially a girl's occupation), including as far as possible every kind of garment in use for ordinary wear, the paintings from copies, shading from models, adapted designs and painting from Nature, all speak for themselves, well and eloquently, of the result of regularity and discipline; whilst an impressive object lesson is shown in the pictures of Clerkenwell Prison having been converted into the Hugh Myddelton Board School. This historic spot in London has seen many changes since the twelfth century, when the Benedictine Nunnery of 'Our Lady' occupied the site of the prison, and the 'Clarke's Well' was hard by; but none are more significant than the changes brought about by the systematic education, which is one of the greatest characteristics and products of the Victorian era.

EDITH BRADLEY.

PAPERS READ AT SATURDAY CONFERENCES AND CONGRESS

I. *EDUCATION OF CHILDREN*

The Work of the London School Board

THE Chairman (Mr. J. R. Diggle) having introduced the Rev. A. W. Jephson, he gave the following lecture, which was fully illustrated with lantern slides. There was no discussion, as it was followed immediately by a demonstration lesson in needlework given by senior girls and infants.

Miss Loch, Examiner of Needlework, had arranged this with great care, and much interest was taken in the lesson by the audience.

Rev. A. W. Jephson, M.A., M.L.S.B.

There are in London 826,371 children of school age. Of these 255,000 are educated in non-Board schools (Church, Roman Catholic, Wesleyan, and British), and the others, 500,000,[1] are under the care of the Board.[2]

The School Board is responsible for the attendance of all children, no matter what school they may attend, and employs 363 visitors, at a cost of 45,000*l.*, to get the children into school. After all this

[1] See article on Primary Education, by Mr. Frederick Davies, in *Handbook to Education Section*, pp. 117–129.

[2] Official Returns. Number of children on the Roll for the year ending Lady Day 1897 was 520,877.

effort and expenditure only 81 per cent. of the children attend—that is to say, there are 100,000 boys and girls away from school every time the schools open. London parents have to learn a great deal yet before our children rival Scotch children in the matter of education.

The number of children increases in London with a regularity which is astonishing. At least 12,000 additional children are each year added to the population. To cope with this great increase the Board has erected 403 permanent schools, which would average 1,000 each school. There are 33 temporary schools, and upwards of 58,000 fresh school-places[1] in preparation.

To teach these children there are over 9,000 teachers,[2] all highly trained and qualified—men and women with degrees, diplomas, and qualifications of all kinds. The average salary paid to a head teacher is 231*l.*; the average salary to an assistant, 108*l.*

To manage this vast machinery, and to control this huge army of workers, a Board consisting of a chairman and 55 elected members, with a chief clerk and over 200 subordinate clerks, transacts its business in the spacious building lately erected on the Embankment. It contains 193 rooms, and in front stands the statue of W. E. Forster, the father of popular education.

[1] By 'school-places' is meant accommodation for school children.

[2] Official Returns:

	Number of Teachers.	
	Men	Women
Head	392	776
Assistants	2,507	4,858
Ex-pupil-teachers and supply teachers	139	687
	3,038	6,321
Grand total	9,359	

When the Queen came to the throne 44 per cent. of the population were illiterate;[1] now only 7 per cent. can be so described. For every million inhabitants in 1837, 1,240 were convicted; in 1896 only 333 persons per 1,000,000 were convicted. Illegitimate births were 67 per 1,000 then, while now the rate is 43 per 1,000. In the early years of the reign there were 48 paupers out of every 1,000 inhabitants; last year there were but 26.[2] In 1850 only 39 people in every 1,000 deposited money in the Savings Bank; now 203 people take advantage of that useful institution. The fifty-five elected members comprise Noblemen, Officers in the Army, Militia, Yeomanry, Clergymen and Ministers, Solicitors, Barristers, Merchants, Schoolmasters, Gentlemen and Ladies without other occupation, a University Extension Lecturer, and a working man.

Happily the code which the Board has to administer is laid down by the Education Department.[3] The children are taught reading, writing, arithmetic and vocal music, with drawing and woodcarving for the boys, and needlework, cookery, and laundry for the girls; all have to take up physical exercises. This practically comprises the whole of the subjects taught. There are twenty other subjects down on the Code called specifics,[4] but less than 38,000 children out of our 500,000 take them, and therefore they may be passed over with a word.

The pupil-teachers' centres,[5] where likely young people and children are taught how to teach and what

[1] *Handbook*, p. 16.

[2] See p. 33 'The Pauper Child,' by Mrs. Barnett.

[3] *Handbook*, p. 120.

[4] *Ibid.* p. 121.

[5] *Ibid.* p. 127; and *Progress in Women's Education*, p. 291.

to learn, are the envy of every town which has sent inspectors to look over them. We have twelve of these admirable schools, and they educate in all 2,419 young people for the profession of teacher. The members of the Board have to see that the subjects are well taught, that proper discipline is maintained, that the tone of the school is good, and that the expenditure is kept within reasonable but efficient limits. How to save money is the one great problem always before them, but no money can be saved until the increasing number of children thronging into our popular schools is limited and lessened in some way.[1] In 1895 the School Board expended close on three millions of money, which sum was raised as follows: 1,500,000*l.* by rate, 625,000*l.* by grant, 600,000*l.* by loan, and the rest in smaller sums under sundry headings. It was spent thus: 1,500,000*l.* on teachers' salaries, 45,000*l.* on loans and interest, 500,000*l.* on land and buildings, and the rest in smaller sums.

There are special schools—for the deaf,[2] in which 513 children are being taught. These are deaf, not dumb children, and by care and infinite patience they may be taught to speak, but it is a very long and very tedious process—for the blind, but only 140 sightless little ones are in our care, there being so many charities for the blind[3]—for the mentally defective,[4] i.e. those dull children who cannot profit by the teaching given in an ordinary school. In the thirty centres there are no fewer than 1,035 of these poor little things. Now these schools for the deaf, blind and mentally defective children are in proportion the most expensive part of

[1] *Handbook*, p. 120. [2] *Ibid.* pp. 125, 126. [3] *Ibid.* p. 126.

[4] *Ibid.* p. 125; see also Mrs. Burgwin's paper, 'The Education of Defective Children,' p. 66.

our work ; yet no one who has seen them ever grudges the money and the pains expended. Our Blessed Lord promised that His followers should do greater works than He did, and this seems like the fulfilment of His Words : the deaf are being taught to speak, the blind made independent and able to earn their living, and mind is being given to those who seem to be without reasoning faculties. These are things to see and thank GOD for.

In the manual training schools [1] every boy receives instruction in the drawing of plans and objects, use of tools, kinds of wood, to enable him to be better equipped for whatever trade he takes up afterwards. In the Cookery Centres [2] the girls are likewise taught what will be useful at home and in after life. Care, cleanliness, exactness (by the use of the scales), and the preparation of cheap but tempting and nicely made dishes will help to make the coming generation of women more efficient than their mothers, and perhaps the digestion of the men will be improved, and less drunkenness ensue. In the Laundry Centres [2] they are shown how to do the necessary washing with the least expenditure of time, money and energy. In the Housewifery classes the great importance of making and keeping the home clean and in order is insisted upon, and instruction is given in cleaning metal and stone, and in the most elementary principles of sanitation and ventilation. These subjects are taught in the Evening Continuation Schools, the attendance of which has increased from 1,700 in 1882 to 17,000 in 1896.[3] The Board schools, which belong to the ratepayers, can be used for Sunday

[1] *Handbook*, p. 123. [2] *Ibid.* p. 124.

[3] The average number on the Rolls was in 1882 2,692, in 1896 27,852.

schools or for public meetings, by payment of a small fee.

A body of managers is attached to each group of schools; they are expected to be in touch with everything that goes on in the schools, and to encourage both teachers and scholars in their work. There are now 2,000 of these unpaid coadjutors in the work of the Board. Whenever possible the School Board places a piano in each department, for the purpose of accompaniment to songs or drill. There is a lending library in each school, from which books may be borrowed by the children; this is greatly appreciated. Penny Banks have also been started in many of our schools, and it is hoped there will be one in every department eventually.

In most of the boys' schools an effort is being made to teach swimming, and general interest is shown in the games of all the children under the Board.[1]

Time will fail to tell of the industrial schools, of the schoolkeepers, of our legal work, of our scholarships, of the store with its millions of pens, pencils and copybooks, which weigh 2,300 tons in all, of the Committees and their work. I will only add that it is impossible to conceive of any occupation more varied in its interest and more engrossing in its demands.

It is extraordinary to watch the great machinery at work helping the child to become a worthy citizen, basing its whole teaching on religious influences, with its prayers and hymns at the commencement and close of each day's work, its careful teaching of the Bible and the plain duties and morals enforced therefrom; to see the skilful way of the teachers, the interest of the

[1] 'Children's Guild of Play,' pp. 73 84.

scholars, and to know that this is going on in 436 School Board buildings as well as in many others not connected with the Board.

A. W. JEPHSON, M.A.

Education in Poor Law Schools

The chair was taken by the Countess of Warwick. In her introductory remarks, she urged upon women who already were or intended to be Poor Law Guardians the necessity of thoroughly studying the question, and said that it was the children to whom we must look to reduce pauperism, for they would be the men and women of the future. 'Am I too sanguine,' asked Lady Warwick, 'in hoping in future years that we shall see our workhouses empty, and in their place hospitals, schools, and similar institutions? Is it too much to expect that the day will come when every man and woman will feel the dignity of labour and throw off the curse of pauperism? This Utopia may be far from us, but certainly our best chance of realising it lies with the children.'

Mrs. Barnett and Miss Lidgett then read the following papers:

The Pauper Child during the Reign of Queen Victoria

Mrs. Barnett

The very name of this Exhibition, and the mental atmosphere in which we have all lived during the last few months, compel me, even if inclination did not induce me, to take a brief survey of the pauper child during the reign of Her Most Gracious Majesty Queen Victoria.

So badly were the statistics kept in the thirties that it is not possible to obtain them all now, and therefore the figures are not complete; but in the year 1837 the total sum expended on the poor was 4,044,741*l.*, or 5*s.* 5*d.* per head of population. The cost last year was 9,866,000*l.*, or 6*s.* 7*d.* per head of population. It is

difficult to get the number of paupers accurately for 1837, but it is known they were large; not, however, so large in proportion to the population as they were in 1896, the number then being in England 840,265, in Scotland 95,868, in Wales 51,168, in Ireland 92,892, making for the United Kingdom a total of 1,029,216, or nearly 3 per cent. of the entire population.[1] It seems to be a very large figure, but careful consideration has shown that it does not exhaust the number of persons who are more or less dependent on the State, because the Local Government Board statistics record merely the number of persons in actual receipt of Poor Law relief on a given day, not the number of persons who have been dependent during the year.

Some forty years ago a careful computation was made in various ways of different persons who during the year had been paupers at one time or another, and as a result the total was found to be three and a half times the number recorded for one day. If this calculation is accepted (but many dispute it) we get something like 10 per cent. of the population, or at least 3,500,000, as the class who during the year had been actually paupers.

To many people figures are a weariness, statistics merely confusing; but the vast amount of pauperism in the midst of this jubilant London is brought home to us by the simple statement that in London one person in every five dies in the workhouse, lunatic asylum, or hospital, and Canon Blackley said that out of every 100 persons who died over sixty years old 42 were paupers. All such statistical studies have their lessons, but, without going further than the figures furnished by the Local Government Board for a given day, we

[1] See p. 27 'Work of the London School Board.'

find that out of the 840,625 paupers in England, 238,489 are children, and it is about the children that I wish to speak.

When the Queen came to the throne the Poor Law Reform Act of 1834 [1] was then but in its infancy, and the influence of exorbitant rates—so laxly administered that relief could be had for the asking regardless of character, circumstances, or even of necessity—was still strong on the pauper-producing classes. Perhaps, even stronger still was the spirit which had produced those reforms, the spirit of stern economy fed by indignation at the readiness of the people to become paupers—the spirit of pity for the neglected children who, dependent on the State, were yet sheltered by worthless parents from obtaining any of the discipline which State control usually guarantees—the spirit of independence which awakened in the industrial world, and stimulated by the Chartist movement, brought home to the workmen that they could not demand respect as a class so long as something like 11 per cent. of the whole population were eating bread which they had not earned.

It was these influences which tended to create the Act of 1834, and which for a time worked it with almost abnormal severity. The orders for out-relief so freely given were now exchanged for the offers only of 'The House,' and into the House (the House which is known by all the poor without a qualifying adjective) they huddled, so close together that in one workhouse twenty-eight men were crowded into a room which only allowed to each 100 cubic feet,[2] five in a bed, while

[1] See p. 48.

[2] Three hundred and sixty cubic feet should be allowed for each child; experts consider 500 would not be too much.

in the women's wards sixteen beds were made to accommodate sixty-four women.

Well might Carlyle, the Chelsea philosopher, hail the new Poor Law as the 'harsh ending of much and the harsh beginning of more.'

In periods of transition there is often pain, and from this painful period there arose a better and more humane system, not before it was wanted, for not only was the old method corrupting to those that received, but to those that gave. One record states that the dispensers often obtained as much as the paupers, and in Suffolk, where the Poor Rates amounted in some parishes to 40*s.* per head, the Commissioner writes that 'the entire Poor Law Management is based on fraud and supported by perjury and deception,' an opinion borne out by the fact that 3,000*l.* a year was expended on the overseers' refreshments (out of 79,000*l.*).

It was after this reckless expenditure and corrupt administration was stopped by the Poor Law Act of 1834, that the worst days befel the children, for they were in the workhouse with the adult paupers.

In those days, when civilisation was less complex and life less strenuous, crime and immorality were the two chief causes which brought the ablebodied to the workhouse, and with the criminal and the vicious in free and daily intercourse unchecked by the teacher's power, unlimited by the lesson bell, the children spent their time, absorbing as only children can those influences which are too subtle to be recorded, too deep-seated to be slain by riper experience or mature decision.

Commissioner after Commissioner condemned this state of things: in report after report is change

advocated, but for a long time nothing was done. In a curious kind of way the righteous seemed to uphold their virtue by condemning the offspring of the pauper to endure a life which all acknowledged was fatal to a right habit of thought and destructive of all that was best in children.

The words of the Commissioners were clung to, who in despair at seeing the whole democracy ready to be pauperised, laid down as a principle that the situation of the pauper shall not be made really or apparently so eligible as the situation of the labourer of the lowest class.

Bound by this rule the children suffered; for, as one inspector said, 'the atmosphere of a workhouse is tainted with vice' (Mr. Tufnell), while another writes, 'The persons usually found in the workhouse are the very outcasts of society' (Mr. Ed. Senior), and with these the children mixed. At last, however, better counsels prevailed, and in 1842 the first separate school Timehouse was founded, and the children removed from the workhouse to its sheltering if bare arms. For this reform—for undoubtedly it was a great reform in those days—we have to thank Dr. Kay (later Sir James Kay-Shuttleworth) and Mr. Carleton Tufnell, who in their ignorance of child nature, and unconscious of what fifty years of experience has now taught the world, concluded that it was from their elders only that children learnt evil, and that away from the heinous sights and sounds connected with adult pauperism the child's soul would expand to all good, and unsullied, ripen towards perfection. (Those were in the days before women had their due share in domestic politics, and unhelped by them the mere male stumbled, erred in judgment, not in will, and therefore nobly erred.)

The idea of separate schools rapidly took root. Unions which did not feel themselves large or rich enough to support an independent school, combined with other Unions and formed district schools. Thus around London there have sprung up twenty-one of such institutions, which it is the fashion now to speak of as Barrack Schools. These establishments are of varying sizes. One is certified to accommodate 1,500 children, and in it 216 officers and servants are employed. One houses 1,100 children and 154 attendants, two contain 800 children, three 700, two 600, three 500, and so on. They are all situated in open well-selected sites; in them the children are abundantly fed, adequately clothed, and all who have seen a Barrack School must add, palatially housed. 'These Pauper Palaces' is how the late chairman of the Departmental Committee, Mr. Mundella—by whose lamented death each pauper child loses a friend—used to refer to them, emphasising with his strong vigour that what a child wanted was not a *palace* but a *home.*

Still earlier, however, than 1841 there arose another system of dealing with pauper children, and it is to three Irish working-men[1] we owe its practical inauguration, although they can hardly be said to have invented it (as Moses was boarded out before he knew it), but their successful working of the method by which State-supported children were reared in the houses of working families brought it to official notice. Scotland adopted it, and England slowly followed in the wake, issuing its first boarding-out order in 1870, some forty years after the three pioneer Irishmen had subscribed their weekly pennies and done the necessary inspection,

[1] See *Children of the State*, by Miss F. Davenport Hill.

some twenty-three years—1847—after more energetic Scotland had had the system in working order. Boarding-out has many advantages: To take *nobody's* child and place it in *somebody's* home where it learns life's lessons amid all the trials and joys of a normal family; to connect it with ladies of the philanthropic and leisured class ready to befriend the orphan through life; to use the rich vein of kindliness ever buried in untutored hearts; to help the child to forget the sorrows of its early life by unaffected mingling with the interests of its new home and playmates; to teach it to love—life's greatest lesson—and to become absorbed into the working-class population. All these advantages are claimed for the system not only by its advocates in our own country but by those who have worked and watched it in all other civilised lands. In Scotland 84 per cent. of the children dependent on the State are boarded out; in Switzerland 73 per cent. In Germany the system is compulsory, in France much used, and although it is always difficult to get statistics in Russia, we yet learned from official sources during a short visit which we paid in 1896 that something like 94 per cent. of dependent children were reared in foster-parents' homes.

Boarding-out, however, has never flourished in England. The class of persons who come forward as Guardians of the Poor seem to be wedded to institutionalism, and it is along those lines that modifications have taken place and improvements been introduced. Not the least important of these was the plan first started by the Birmingham Board of Guardians,[1] by which children were housed, not in one large institu-

[1] See Report of Birmingham Board of Guardians.

tion, but in many smaller villas, and placed under the care of house mothers.

At Marston Green in 1878 there arose the first of these Village Communities, where undoubtedly the children get many advantages—their health is better, their training more considered, their characters moulded as they cannot be when among many hundreds in the Barrack Schools. But the whole system has the disadvantage of being artificial, all the boys are divided from the girls, and they never see a baby. The children mix only with others of the same class, sex, and circumstances as themselves. They lose the lessons which old age unconsciously teaches, and miss the experience of sin and its results which the Greeks thought important enough to impart by the degradation of the Helots.

Last in chronological order among the systems started in our Queen's reign for the good of her pauper subjects has been that known as the Scattered Home system, and once again we have to yield the honour of starting it, not to London but to a provincial town. In Sheffield brains the idea took life, and by Sheffield patience it has been brought to a successful accomplishment. The plan is not to build palatial institutions or to found pauper colonies, but to have ordinary commonplace everyday sort of houses in the lower middle or working-class neighbourhoods, and there to place fifteen children—boys, girls, and infants—under the care of a house-mother who has occasional efficient help. Under her the two or three big girls do the domestic work, learning ordinary duties as they perform them. The children attend the neighbouring schools, romp with the next-door children, join in the noisy pleasures of other youngsters in the parks and open spaces, and

share the elevating influences of the Church, Chapel, or Band of Hope. They forget they are paupers, make friends with workmen's children, see life and its consequences, and take their position as ordinary people among the industrial population of the northern towns.

Of emigration I will not speak. As early as 1869 Miss Rye took children to welcoming Canada, which still, but in a different spirit to Dickens's immortal Oliver, 'asks for more.'

So much then for the six different systems founded, as it were, during these sixty years.. We pass them in review:

Children in the Workhouses.
Children in the Barrack Schools.
Children in the Village Communities.
Children in the Scattered Homes.
Children in the Workmen's Families.
Children by the Colonists' Hearths.

Which is best? Which is worst? I will reply by a principle. That is best which most nearly approximates to the divine institution of the family; that is worst which robs a child of its God-given right of individuality, and makes it but a portion of a huge machine.

In proportion as humanly organised systems approach to nature they succeed, and this is specially true when applied to that tender, complex, naughty, lovable thing called a pauper child.

Judged by this principle, barrack schools stand condemned, and must perish. I do not blame, no one blames—and least of all I, who for nineteen years struggled with the problem as a guardian—those who administer this system of aggregated schools. They

have found, not founded, a system, and I speak from intimate knowledge with many guardians when I say that the efforts they have made to make an unworkable system work are little short of heroic. But it won't do. Experience has condemned it, and the true child lover will show his loving wisdom best who uses his brain tissue not in defending and bolstering up a system condemned by that irrefutable judge Experience, but by finding a more excellent way and a new use for those colossal and mistaken buildings. In barrack schools the children's standard of health is lower, and among children collected in hundreds zymotic diseases find a suitable soil. This is no unproven opinion, but a fact based on the statements of the medical officers who were asked in writing to state the percentage of children in the infirmary on a given day. In one school, besides those marked invalids, of which there were 14 per cent. in the body of the school, there were 16 per cent. in the infirmary (Sutton); in another (Leavesdon) nearly 30 per cent.; in a third (Hackney) 27 per cent.; in a fourth (Edmonton) 15 per cent., and so on. Some medical officers, however, show much lower figures, and some do not reply at all; but if those who do are averaged, it will be found that 12½ per cent. of the whole population of barrack schools were on that day in their respective infirmaries. The best expert opinion on *ophthalmia*[1] has shown that, for some reason or another at present unknown, life in an aggregated school tends to make the eyes unhealthy. From two tables only will I quote. Dr. Stephenson in 1890 says that 3 per cent. of the children who had been less than one year in the school had decidedly granular lids, but that 13 per cent. were similarly affected when they had

[1] P. 58.

been more than one year in the schools. The official figures in that year were 780, now they are 972. Sixteen years before, Mr. Nettleship found that out of those who had been one month in the school 5 per cent. were decidedly diseased. Out of those who had been one year 23 per cent. and out of those who had been more than one year 44 per cent. were similarly affected.

When massed in barrack schools the children have a tendency to become 'dull, sullen, and mechanical,' a tendency explained by inspectors and experts as being caused by the daily monotony of even the best large institution, and the over-amount of uninteresting manual labour which the size of the institution renders it necessary for the children to accomplish. The education also as given in most of the London Poor Law schools is, according to Sir Joshua Fitch, 'far below the standard usually attained age for age by the children in public elementary schools,' and this he points out is the case notwithstanding that some of the conditions of the Poor Law school life are exceptionally favourable, instancing the fact that the attendance of the scholars is absolutely regular, and that the whole control of their leisure and the discipline of their lives is in the hands of the teachers and managers of the schools. The inspector is severe on the Local Government Board both on account of its low requirements and manner in which the schools are tested, adding the opinion that no Metropolitan Poor Law school, if measured by the usual tests of the Educational Department, would be classed as 'excellent.'[1]

On the technical training as given in most of the London barrack schools, the Local Government Board

[1] Cp. Miss Lidgett's statement, p. 45.

inspectors are as severe, if not more so; the chief inspector affirming that in his opinion it is 'most unsatisfactory,' and the educational inspector characterising it with equal disapproval.

But it may be argued much of this could be improved. Granted. But the *system* would still remain, the system which by its monotony warps a child's faculties, or by its woodenness dwarfs his growth, which by its rigour stirs the child's antagonism, and by its dulness crushes his imagination, and by its very efficiency make the child inefficient; for being mechanical it fails to give what is essential to all true education—namely, *choice*, the daily deliberate acceptance of right or the possible refusal of wrong.

So much is the village community the fashion just now, that it is as well to remind ourselves that its artificiality must preclude its becoming an integral part of our national life, while its cost does or should prevent many unions saddling their ratepayers with it. At the Hornchurch Village Community each child costs 38*l.* 6*s.* 7*d.* a year, whilst at Banstead the Child Pauper has cost 90*l.*

It is thought by some that I hold that all children could be boarded out. Alas! I know the London poor too well to advocate the admission of some of them into tranquil villages. No! after careful consideration I do not believe that more than 20 or 25 per cent. of the 14,000 children now in London barrack schools could be boarded out; but there are other ways of regulating them, and it is to the honour of Whitechapel and Camberwell[1] that they are the first of the Metropolitan Boards which have decided to provide for their children

[1] See Report of Whitechapel Guardians, 1896.

in small groups, small enough for each to be cared for as individuals.

As we survey the sixty years, it is a *glorious* advance that has been made, but this glad Jubilee year would become a year of mourning if the survey led us to rest on our oars and say 'It is enough.' There is yet more to do.

At this very day there are 3,000 children in the London workhouses, still for the most part mixing with the adult paupers and learning their evil ways. To-day there are 972 children suffering from ophthalmia which they need not have had. There are still only 1,802 children boarded out, or about 5 per cent. of the child-dependent population. To-day there are little ones massed in such numbers together that their names are not known. Last night it is computed that 30,000 children slept somewhere, anywhere, being homeless. The 'children's cry' still goes up, and in our pride and our gladness that so much has been done, we must perhaps pray still more earnestly the Rudyard Kipling hymn prayer:

> Judge of the Nations, spare us yet,
> Lest we forget, lest we forget.

HENRIETTA BARNETT.

Education in Poor Law Schools

Miss Lidgett

WE are told that if we really understand the simplest flower, the commonest stone by the roadside, we have the key to the making of all visible things. So, too, if we really understand the Poor Law child, we ought to understand the complicated society that has helped to produce him. We cannot admit with some that the subject of his present training, of

his past or of his future, has worn threadbare with discussion. As to his past, if we were asked 'Who did sin, this child or his parents, that he was cast upon the world?' we should promptly answer, 'Certainly not the child. At his age he could not help himself.' The disgrace, such as it is, of his state of orphanage or worse, must lie entirely with parents who have failed in their duty to him, to each other and to all the world.

It is the duty of the relieving officer, through whom the Poor Law first takes knowledge of the child, to trace out the antecedents of his parents and all their way of life, and to keep watch on their movements. It is his business to be on the look-out for a deserting father, to be aware of any change in the position of a widowed mother, and to recall her to duty if he finds her married again or living in comparative ease, and yet continuing to burden the parish with her children. It is his business, too, to report as to the kind of home she can provide, if, after the guardians have maintained and partially trained them, she claims to have them returned to her care. It is no light duty, especially in a large city, for an officer to search out the truth, to keep the facts clearly in mind, to record them accurately and still to watch for what may happen. It is only by strictness and activity in this work that parental neglect can be kept within bounds. Again, it is mainly on his report that the guardians put in force the Act of 1889, which empowers them to take under their protection the children of deserting parents and to refuse all communication between them until the boys are sixteen and the girls eighteen years of age. It would be most unjust to speak of all destitute parents as vicious and neglectful. For there must naturally be many widows who cannot support more than part of their family, and

who are unable to control and train children while going out to work. The parents, good, bad, or indifferent, must all be kept in mind by those who take care of the children.

The words of Sir James Kay-Shuttleworth, written in 1840, are still, generally speaking, true, and must always remain so: 'The children placed under the guardianship of the public have descended to a lower moral and social condition than would have been their lot if the parents had performed their natural duties.' It would certainly be discouraging to a struggling, self-denying father if he had reason to think that no effort or self-denial on his part would enable him to start his children in life on a higher level than the children of idle and drunken parents abandoned to the care of the public. But when parents have failed to perform their natural duties, and the children have come under the guardianship of the public, how shall they be treated? They have been and they are in a lower social and moral condition than the children of good parents. Now under proper care they must begin, and they do begin, to rise again.

First, they are received into the workhouse and placed under trained attendants. They must be cleansed and brought into a condition of health, to be medically certified as fit to take part in the educational work of the school. I do not here speak of children under two years of age, or of children afflicted with chronic ailments, who must be nursed in an infirmary. Whether they are sick or healthy, it would be a mean and false economy that would grudge any care or expense necessary to make amends for past deficiencies.

It would not be out of place to go back for a few minutes to another time, when the public took a

different view of their duties, to the years just before and after the Queen came to the throne. Three years before her accession—in February 1834—the Poor Law Commissioners presented their great report,[1] and during the first ten years of her reign they were still suggesting and guiding reforms carried out by overseers and guardians of the poor, chiefly as to outdoor relief, but also in the better order of workhouses and the classification of their inmates. There are many passages in their report showing the condition of workhouses over sixty years ago, where the inmates mixed indiscriminately in idleness and vice, and in whose midst the parish children grew up to follow in their ways. One of the most unwelcome and the most salutary reforms immediately ordered by the Poor Law Commissioners was the separation of the sexes, and the separation of children from adult paupers.

It is really refreshing to look through the Poor Law Report of 1840 and to see how, under the new impulse, parishes were waking up to their duty, how teachers then appointed entered upon their work, with what enthusiasm they spoke of the arrangements of their school-rooms, of getting a decent supply of school-books, of teaching singing or drawing, or of adopting the Pestalozzi system. They tell too of the good results that followed, of the children's response to their efforts.

But this was a time of transition. Improved ideas demanded better buildings and better surroundings. The Poor Law Commissioners of 1834 had recommended the grouping of certain parishes into unions large enough to bear the expense of schools complete

[1] See p. 35.

in themselves, entirely separate from the workhouse, and built on a scale that commended itself to most people at that time. Anyone who reads a book called 'The Lord's Dealings with George Müller' will learn what were his thoughts when he founded his Barrack Orphanage on Ashley Down, Bristol, and what were the thoughts of benevolent people who, without advertisement or appeal, poured in their gifts to the aid of his enterprise. It was about the same time that Dr. Reed founded his orphan asylums round about London with the sympathy and support of the philanthropic world.

At that time a large training school for 1,000 children was opened as a private venture at Norwood, and another at Tooting. They received children from Metropolitan guardians at so much per head. Their work was much commended in the early reports. But an outbreak of cholera at the Tooting school in 1849 revealed a state of neglect which brought these proprietary schools to an end in London.

No one could complain that the Poor Law authorities pushed forward their building schemes with undue haste. There is not time to speak of the large schools away from London, such as Swinton and Kirkdale. The subject will come out clearly enough if we consider the Metropolitan Poor Law schools.

The North Surrey Guardians were the first to form themselves into a union for school purposes. In 1849 they bought their site of about sixty acres at Anerley to accommodate 900 children. The South Metropolitan Boards followed on a still larger scale when they provided for 1,543 children at Sutton on ninety-two acres of land. In 1856 the Central London Schools were built at Hanwell for 1,148 children (but now certified

for only 746). Two years later the Marylebone Schools were built at Southall for 390 children.

Then there was a pause of ten years. The year 1868 saw the purchase of sites at Ashford, Leavesdon, Leytonstone, and Norwood. Although larger than Southall, there was a drop in the numbers taken all round, Ashford heading the list with places for 788 children. The last school planned in the old way was Mitcham, built in 1873 for 500 children. The only considerable enlargement of these schools has been made at Norwood, and finished in 1886 by the Lambeth Guardians.

Early in the seventies the district schools came under review, and a new system of building was adopted for the next new schools, begun in 1877. The Banstead Schools consist of separate dwelling-houses, with school-rooms in common. The same plan has been followed with the Hornchurch Cottage Homes belonging to Shoreditch.

What was it that so visibly affected the minds of Poor Law authorities in the seventies? It was in 1872 that Sir James Stansfeld, then President of the Local Government Board, appointed Mrs. Nassau Senior[1] to inquire into the training and later career of girls brought up in the Metropolitan Poor Law schools. She carefully inspected the schools herself, receiving every assistance from the officers in charge. She then searched out the history of 100 girls who had left the district schools during the previous five years. She found that as many as fifty-three had to be reckoned as failures, nineteen of the fifty-three having gone quite wrong. Corresponding failures, though not so marked, might have been shown among the boys. Mrs. Senior

[1] See *Pioneer Women in Victoria's Reign*, by Edwin Pratt, p. 228.

pointed out various causes for what she showed to be a most disappointing failure.

What was to be done? A hot and hasty impulse might have voted for general destruction. But a reckoning would have had to be made with the rate-payers; and even if they had agreed, the difficulty would have remained in another form. Remedies characteristically English were brought to bear.

One great need had revealed itself which might be met without any disturbance of existing institutions. The after care of these friendless or worse than friendless girls might be undertaken by a voluntary organisation whose methods should be simply methods of wise friendliness, free from the reproach of charity, and equally free from the associations of the Poor Law. The Metropolitan Association for Befriending Young Servants[1] was founded, and work was begun without the slightest upheaval of the powers that be, though it had an indirect share in changing many of the persons in power.

The public generally had been equally ignorant and careless as to their representatives in the care of the children. People who would have gladly subscribed for an orphanage had paid their rates perforce and had put their voting-papers into the fire instead of electing fit persons to manage the rate-supported schools. So the Poor Law children had been left almost entirely to bodies of elderly tradesmen, who in their more active life had found no time to give a thought to educational or any other large movements. In some respects they were ahead no doubt of the overseers described in the report of 1834. But it was high time that the monotony of the old Guardian Boards should be disturbed by

[1] See *Pioneer Women in Victoria's Reign*, by Edwin Pratt, p. 232.

men and women of different training and association. It is good that working-men should contribute their experience, as the law now enables them to do, although it would be a mistake to suppose that the work could be rightly taken up as the occupation of a leisure evening only. It was good that professional men and men retired from the public service should bring their wider knowledge of life to bear upon the work. But if, as Mrs. Senior said, these children needed 'mothering,' what could be more reasonable than to induce women to share the labours of men guardians? No one would argue that women had been the direct authors of all the improvements in the care of the children. But it is quite certain that the last quarter of a century has seen an extraordinary improvement; and this is generally and rightly attributed to the presence of women on the boards and committees of management.

Like other guardians, they had to take things as they found them, and first of all, as they could not destroy the large schools, they tried to improve their management. It must always be vital to the children that the staff, the persons in trust with them day and night, should be capable, conscientious, and devoted to their work, and that the work should be under the careful supervision of their Visiting Committee. With single-minded devotion of managers and officers under the expert guidance of the Local Government Board the work becomes a living thing.

To raise the standard of work, character, and qualification, to keep pace with public opinion, must necessarily be a process extending over many years. In the meantime every office and every appointment is important to a manager who is working for

the future. If we measure the time for waking up the voters, for reconstituting boards of management, and then for filling up vacancies in the staff of a large establishment, it will be clear that the most eager and progressive manager must be content to hasten slowly. But if women guardians have also learned to work without haste, it may safely be said that they have worked without rest.

But the duty of managers to their staff does not consist only of making new appointments. They have to study sympathetically the duties and the difficulties of the officers they find at work. In the most drowsy staff that ever was there would be one or two able to welcome the fresh zeal and interest of a visiting manager; and others who suspected new-fangled ways would learn to trust those who steadily kept before them the best interests of teachers and children alike.

One of the very first objects of women guardians was to bring plenty of play within reach of the children, both boys and girls. Fifteen years ago it was a matter of course that long hours of monotonous mindless labour should fall to the lot of the elder girls. One change was made by sending them to service earlier than was formerly done, as the new guardians held that if the work of the girls was of value to the schools it was of value to themselves also, and that a life of independent self-support should, if possible, begin for them as early as for the children of respectable working people. And with the friendly backing or mothering of the M.A.B.Y.S. it was now possible to send them out earlier with safety.

For those who remained, the view gained ground that it was wiser to engage an extra servant or to adopt new means and appliances than to keep a girl in a

school for the sake of the school instead of using time for education and domestic training. So, while the children were to have more play, the work they did was to be made more educational.

As for school education strictly speaking, the Local Government Board in 1878 issued the following order:

'The standards of examination to be observed shall be those prescribed in the Code of the Education Department for the time being.' The guardians and managers have carried out the order, and now their generally expressed desire is that the authority that makes the Code shall supply the examiners to guarantee the standards as uniform with all others under the Code. There is evidence to show that the standards are more strictly maintained in the Poor Law than in other elementary schools.[1] The head master of one of the large Board schools in the parish from which the children came, on looking through the examination papers of more than ten years past, considered that the work corresponded with those of the same standards in his own school.

It may be objected that the Code teaching is dull and mechanical, that the children take no kind of interest in their work. There are few schools of any kind where boys will profess to be interested in their lessons. They have to do them, and that is enough. But the school work is not without interest. In one school, singing; in another drawing will be the favourite subject; and any teacher might wake up the children with the interesting and attractive Readers now in use. It was said in the Report of the Departmental Committee that the boys managed to pass creditably in the

[1] Cp. Mrs. Barnett's statement, p. 43.

examinations under the Science and Art Department. No one would wonder who saw how earnestly they set to work, or who knew how they looked forward to the drawing lesson through the week.

During the last few months an order has been received from the Local Government Board that no school child who has not passed into the fifth standard, or who is not over fourteen years of age, shall have more than one hour of industrial or domestic work in the day. The usual standard previously was the fourth, and the age was eleven years. This order is welcomed by the school teachers, while it is questioned by others who doubt whether the neglect of years can by any means be made up by complete days of schooling, and whether neglected children will not thus have to be pushed out into the world with little book learning and no trained use of their hands. Another Educational Order was that Kindergarten teaching was to be given to the infants between the ages of three and five. Hitherto school work has begun at five years of age, and, as in other infant schools, the children between five and seven years old have taken the usual standard subjects and Kindergarten occupations, such as clay modelling, building, plaiting, or wool work.

In the large Poor Law schools industrial teaching is given in shoemaking, tailoring, carpentering, and blacksmithing, all of which are suitable for boys. In the evidence given by Mr. Wainwright to the Departmental Committee, nothing could be better than his account of Anerley with its picked body of first-class mechanics; from this school the boys secured good employment in the trades which they learnt in its workshops. Banstead and Forest Gate had also a very good report to give of their work and success. The

number which can be taught will vary according to the trade; but it is obvious that proper supervision cannot be given to many boys working at the same time. They are generally taken in two divisions as half-timers. It cannot always be assumed that a boy trained in a carpenter's shop will necessarily become a carpenter. He may be an upholsterer, or a gentleman's servant. But in any case his training will not have been wasted. The main object of such teaching is to insure accuracy and attention and to promote observation.

Great improvements have been made in teaching needlework. For this too has had to move forward with the Code of the Education Department. It is only occasionally that a clear test can be applied to the industrial work of the children, as against workers outside. The opportunity was given three years ago by the M.A.B.Y.S. in their exhibition at St. Martin's Town Hall, open to all the young servants under their care, those who had learnt in the Poor Law schools, and the 'locals' who had been taught in ordinary elementary schools and had lived at home.

The proportion of schoolgirls was as one to two of the others, yet their work won eighty-four prizes, and the work of the 'locals' won twenty-four. In the same exhibition was a loaf made by a Leavesdon boy which obtained him employment with a baker the following week. In November of the same year the Women's Help Society got up another needlework exhibition, at which some of the work was very fine. In competition with good working women, including small dressmakers, the schoolgirls won nearly two-thirds of the prizes. Miss Poole in her evidence said that one of the pieces of needlework (a baby's robe planned, cut out, and made by a schoolgirl) was as

fine a piece of work as any in Bond Street or Regent Street.

I have not mentioned gardening as a technical subject for boys, as there are, practically speaking, no openings for our boys. They are secured by gardeners for their own relatives. Work in the garden no doubt has its use for boys going to Canada.

It has been the practice in some schools to have a lecture about Canada, with lantern illustrations, once a year. This inspires a large number of boys with a wish to go. By the time every case has been fully considered the numbers are reduced by about three-quarters. There is still a time of waiting and preparing, during which the boys are put through the tailor's and the shoemaker's shops to learn the use of their hands. Very cheering letters have been received from boys and from their visitors, showing how happily they can work on farms in the new country when carefully chosen and carefully trained, and when sent out at a suitable age.

But my subject is Education in Poor Law schools. So returning from Canada, and avoiding boarding-out as not coming within the limits of the subject given me, I will say a few words more on the schools themselves. The schooling then is simple, but up to standard; the manual training prepares the children for employment; the games, the summer holidays, the winter evening entertainments (often got up by the children themselves), all these things help to efface sad memories and to awake interest and energy to enable them to take hold of life in the right way.

The play hours also bring time for reading. The school libraries deserve a thought from all those who value their own inheritance of books; and they would

do well to enable their less-favoured brothers and sisters to enjoy the same delightful stories of adventure and romance which are found in the best books, new and old.

After they have grown up, many of the children are bold enough to retain some of that *esprit de corps* that other schools try to develop. Only a few months ago the Strand Guardians received a letter from six of their old boys on service in India, saying they were sorry to see hard things said against the schools in the newspapers. For themselves, they were all non-commissioned officers, and they wished the guardians to know that all their success was due to the start they got at the Edmonton Schools. A similar letter was received from old Sutton boys in Egypt.

But this paper, incomplete as it is, must not close without referring to the last order of the Local Government Board, to provide for grouped schools of children suffering from ringworm and ophthalmia,[1] for children mentally defective,[2] and for children needing a time of seaside schooling. Seaside proprietary schools, like the old schools at Tooting and Norwood, have fallen out of favour with guardians; and certain parishes and unions have already provided their own schools at Herne Bay, Broadstairs, and Margate. The benefit is so great that it is to be extended to all parishes contributing to the Metropolitan Common Poor Fund. These will in future be under the care of the Metropolitan Asylums Board.

No more prolific cause of pauperism than ophthalmia could be found to blight the life of a child during the tedious weeks or months when he is neither well nor

[1] See Mrs. Barnett's paper, p. 42.

[2] See Mrs. Burgwin's paper, pp. 66 72.

ill. In Mrs. Senior's time it was rife in the large schools. It was so serious that in 1874 Dr. Nettleship was instructed to inspect all the children in the Metropolitan Poor Law schools. Again, in 1896, Dr. Stephenson made a similar inspection. Their inquiries brought out respectively the following results:

In 1874 Dr. Nettleship inspected 8,798 children: Suffering from discharge from the eye, 12 per cent.; granular lids, 42 per cent.; damaged sight, 9 per cent.

In 1897 Dr. Stephenson inspected 13,000 children: Suffering from discharge from the eye, 4 per cent.; granular lids, 4·9 per cent.; damaged sight, 1·2 per cent.

This shows enormous hygienic progress. It is now admitted to be something worse than a misfortune, to say the least of it, when a school has an invasion of ophthalmia.

Other statistics, such as those obtained by (1) Lord Warkworth on May 30, 1896, (2) Mr. Lockwood on September 29, 1894, or the figures given by (3) Miss Poole to the Departmental Committee, all point in the same direction. They show that without doubt our English mode of progress is a sound one. For example:—

The following comparative statistics of results on girls trained in the Metropolitan Poor Law schools and placed out in service was given in evidence before this committee.

Mrs. Nassau Senior, 1873: Good and fair, 38 per cent.; unsatisfactory, 43 per cent.; bad, 19 per cent.

Miss Poole, 1893: Good and fair, 72 per cent.; unsatisfactory, 5·7 per cent.; bad, 0·9 per cent.

Miss Poole's unclassified remainder were either defective mentally or physically, in training homes, with relatives, or lost sight of.

What, then, have been the special causes of improvement?

First and chiefly, there has been very much more individual care of the children, both by guardians and their officers.

Secondly. A shorter stay in the schools, boys and girls going to independent work as soon as they are able to do it safely.

Thirdly. The transference of certain elder boys and girls to special training homes, prolonging the period of training and protection.

Fourthly. The application of the Protection of Children's Act, 1889.

Fifthly. The after care of the M.A.B.Y.S.

(*a*) Friendly visiting of girls in service.

(*b*) Providing holiday homes.

(*c*) Care during sickness or convalescence.

Sixthly. The care of the feeble-minded,[1] a class for whom guardians and officers have greatly enlarged their sphere of work.

It would have been interesting to say something of the advances made by provincial and country Boards. Whether in town or country, the governing bodies who provide for these children must represent those who have to pay for them. For embodying a new idea a voluntary society will generally be best. For a wide-spreading work supported by the rates representation is inevitable, although the supplementary work of voluntary institutions should be made available for special purposes. In working out the Poor Law, the qualification of a representative is mainly personal; and representation on party lines must be entirely out

[1] See Mrs. Burgwin's paper, pp. 66 72.

of place in a work of so much detail. The short sketch I have given of the last sixty years shows how, broadly speaking, the mind of the people has been reflected in the treatment of Poor Law children. Sir Henry Fowler's Act of 1894 provided that it should be still more so. The electors, no doubt, need stirring up and enlightening. But, on the whole, they will do wisely to avoid candidates who make very startling proposals.

The children's guardian must be awake, 'and with the sun his daily stage of duty run.' Nothing startling or violent may happen, the misspent moments may never be redeemed, but at least the present day's work will be better done, and then increased capacities for life generally, will be as certain as the day itself.

E. S. LIDGETT.
Guardian of the Poor, St. Pancras.

Mrs. Francis Rye, Hon. Secretary of the State Children's Aid Association, asked permission to explain briefly the object of her society. It contended that none of the existing systems for providing for pauper children are calculated to give full scope to their faculties, and that better results might be obtained (1) by abolishing large schools and bringing children up in families or in small groups, where they would be daily in touch with the various interests and activities of social life; (2) to dissociate children from all connection with the workhouse and the officials who have to deal with the pauper class; and (3) to obtain from the State further powers of control over neglected children.

Mrs. Francis Rye

In the discussion which followed, Mr. E. H. Pickersgill, M.P., said he ventured to think that the

present system was not the best which could be taken to prevent the children of paupers from becoming paupers; we were now beginning to learn that the essential feature of success in dealing with large numbers of people, whether children or adults, was to treat each as an individual person.

Mr. E. H. Pickersgill, M.P.

Lady Windeyer gave an interesting account of the boarding-out system of New South Wales (the colony of which the late Sir William Windeyer was Attorney-General). All children are considered children of the State who are in asylums or other institutions subsidised by the Government, and there are scarcely any charitable institutions in New South Wales which are not subsidised by the State, because the practice obtains of giving pound for pound to private subscriptions. When the children are taken from their pauper surroundings they are classified in the following way by the State, either as boarded-out children, apprentices, inmates of cottage homes, or inmates of the Cottage Ophthalmic Institution. This last is simply a cottage home presided over by a mother well trained in the treatment of eye diseases—it is, in fact, an ophthalmic hospital. The number of children in the colony only amounts to 3,600, and there are seldom more than twenty-six in the Ophthalmic Institution.

Lady Windeyer

The Boarded-out Children.—The unhoped-for success of this movement, Lady Windeyer considered to be largely due to the ladies of the boarding-out districts, who superintend this divisional work of the Board. The children are placed in the homes of people willing to act as their foster-parents; they must attend school regularly in conformity with the Education Act, until they reach the age of fourteen. The child ceases, how-

ever, to be a *boarder* at the age of twelve, and has to be *apprenticed*; the large proportion are apprenticed in the homes where they have lived so long. This is regarded by the Board as a matter for great congratulation. The foster-parents prefer to take these children into their homes, pay a small sum as wages (about 1*l.* per quarter) and provide clothing, in order to retain them as their children until they attain the age of seventeen, when the State child is free from apprenticeship.

Cottage Homes are required by the State for defective children, who, unfit to be placed with those who are healthy and strong, are put into these homes in the country, where the situation and soil of an ironstone nature is peculiarly suited to diseases of the eyes.

In conclusion, Lady Windeyer dwelt upon this point as being worthy of attention by other Poor Law guardians.

After many of those present had given expression to their views on this important subject, Lady Warwick closed the discussion by urging that all should consider how the excellent suggestions made on both sides of the question could most wisely be carried into effect.

The Teaching of Defective Children

Sir Douglas Galton, K.C.B., who occupied the chair, introduced the subject of Mrs. Burgwin's paper with the following remarks:

Sir Douglas Galton, K.C.B.

I was glad to accept Lady Warwick's invitation to preside at this meeting, because my attention has been directed in recent years to the question of the connection between the efforts of the brain and physical conditions of the body. For it is only by a careful consideration of these problems

that the education of children can be brought into lines with scientific knowledge.

Mr. Charles Roberts, in his interesting memorandum on Physical Education in Schools, calls the education of children a national industry which is concerned with a capital of 900,000,000*l.* and an annual revenue of 20,000,000*l.* If this large industry is to be properly administered in the interests of the population so as to produce the maximum beneficial result, the influence of school work on the health of the children must be carefully studied.

The conclusion at which Dr. Roberts arrives is, that with proper management in its various branches, school work would become the most healthy occupation (not excepting idleness) which children could adopt, and he appears to consider that, with proper sanitary supervision and an adequate combination of physical exercise, overpressure would not occur.

The influence of the efforts of the brain on physical conditions of the body has long been studied in Italy, France, Germany, and the United States.

Professor Mosso showed by the instrument he called the Ergograph that the will or brain power which caused the muscles to move became exhausted before the muscles had lost their power to contract. As an example of exhaustion from brain work he instanced how, in listening to music, the attention becomes dull when listening to a symphony, sooner than when listening to an opera. Because in the former case the hearing alone is concerned ; whereas in the opera the sight and the hearing relieve each other.

Professor Griesbach, in Germany, endeavoured to ascertain the effect of brain work on the nervous system in a boys' school in the following manner :

He took a pair of compasses or dividers, and ascertained before the lessons began in the morning what was the smallest distance between the points which a boy could distinguish when pressed against the cheek or lips. After three hours' lessons he tried again. He invariably found that a greater distance between the points was necessary to enable both points to be felt, after the lesson than before. It is now being arranged to carry on systematic investigations on the lines of the German and American observers at a new laboratory of psycho-physiological science, which is being prepared at University College. This science, indeed, forms a borderland between physiology and psychology.

In this country our efforts have hitherto been directed to obtaining practical results. The British Medical Association and the Charity Organisation Society requested Dr. Francis Warner, some ten or twelve years ago, to conduct an investigation into the average development and condition of brain power among children in elementary schools.

Dr. Francis Warner's method was to study the brain conditions, partly by observing the proportion and types of development of the body and its parts, and partly by observations of the nerve signs expressing the brain action, as, for instance, the physiognomy and facial movements, as well as movements of other parts of the body.

Dr. Francis Warner examined above 100,000 children, and the very interesting results which he obtained were published in a report which is obtainable at the Parkes Museum in Margaret Street, W. Dr. Francis Warner found that from 3 to 5 per cent. were what may be termed defective, but that about 16 per 1,000 might require special care.

The London School Board and the Education Department have taken the subject in hand, and you will hear from Mrs. Burgwin particulars and views which it would be out of place for me to anticipate.

Mrs. Burgwin

No Act has ever conferred a greater blessing upon a people than the passing of the Education Act of 1870, making education compulsory for all children between the ages of five and thirteen. The great blot upon it was the system of 'payment by results,' which laid down that all children were of equal mental calibre. Soon the teachers found that as all children—willingly or unwillingly—came to school, there were many who could not reach the required standard. Then was raised by them the cry of 'over-pressure' in school, in which they were wholly supported by the medical profession, who largely at the hospitals saw children suffering from chorea, and heard the parents' complaints that their children cried out in sleep, worrying over unfinished lessons.

The Education Department thereupon brought in a Revised Code, and as this gave liberty of classification to the teachers, it was hoped that all children could now profitably attend the elementary schools.

The teachers under this Code were enabled to take a higher view of their duty, and instead of dealing with the children in the mass, they regarded them as individuals, and realised that what had been attributed to the wilful silliness of the child, was in reality owing to mental or physical defects.

The London School Board in March 1891 considered the following recommendation of the Royal Commissioners on the Instruction of the Blind and Deaf: 'That with regard to feeble-minded children they

should be separated from ordinary scholars in public elementary schools, in order that they may receive special attention.'

At the seventh International Congress of Hygiene and Demography, held in 1891, it was resolved that this Congress do appoint a Commission, consisting of persons severally conversant in (1) the examination of the physical condition of children; (2) mental conditions and diseases; (3) education and methods of dealing with children; (4) statistical compilation of facts. This latter was undertaken by Dr. Francis Warner, who has since examined 100,000 children.

In 1894 a Departmental Committee was appointed to inquire into the existing systems for the maintenance and education of the Poor Law children, and amongst a series of resolutions one states 'that suitable homes be provided for feeble-minded children by the boarding-out system, or that they be placed in small voluntary homes specially suited for their care and maintenance.'

A committee was formed presided over by General F. J. Moberly, who has continued chairman and unceasingly assisted in the progress of this humane work.

A superintendent was appointed, who, before commencing work in London, travelled on the Continent, in France, Germany, Denmark, and Norway, in order to study the systems which were in operation there for teaching the idiot and feeble-minded child. The work has grown from the single class opened in 1892 with fifteen children, to the thirty centres already opened with 1,120 children upon the roll, and a staff of fifty-one trained certificated women as teachers; yet this by no means represents the needs of London.

The classes are mixed and are all taught by women. The boys number 605 on roll, and the girls 515.

At the present time a Departmental Committee is sitting for the purpose of inquiring into the existing systems for the education of feeble-minded and defective children not under the charge of guardians and not idiots and imbeciles, and to advise as to any changes either with or without legislation that may be desirable.

As this committee has not yet reported, I cannot allude to its transactions.

Having thus briefly traced the origin of this movement in England, I come to the child and its education.

And here let me say I do not propose to deal with the medical aspect of the question, leaving that to the medical expert.

The Board defines a child suitable for what is now called the special classes as one intellectually weak, poorly endowed with perception, memory, reasoning, &c., and before it is admitted to the special class it must be nominated by the master of the ordinary school and examined by the superintendent. The classes are inspected by Her Majesty's Inspectors and are free.

At the Congress of the National Union of Teachers held at Norwich in 1885, I read a paper on 'Overpressure' in elementary schools, and strongly urged the necessity of the children being periodically examined by a doctor, for teachers daily saw their time wasted over pupils who needed the doctor rather than the teacher.

Many a man and woman now upon the rates as invalid paupers would, I venture to think, be self-supporting if their bodies had received proper care in childhood. And you say, 'And why did they not, when we have the grandest system of hospital treatment for the poor, of any country in the world?' My answer is,

'The parents are often ignorant of what ails the child, they are sometimes apathetic, and in many instances, alas! the mother leaves home at 8 A.M., returning after twelve hours' absence, too worn out in mind or body to think of the health of the children, contenting herself that she has done her duty in providing them with the "daily bread."'

The State is satisfied that the child is housed, clothed, and fed. I daily see children suffering from rickets, which Dr. Arbuthnot Lane says 'is a condition solely dependent upon impaired nutrition, and in the large majority of cases it is due to excessive, unsuitable, and frequent feeding, and not to an insufficient quantity of food.' The teeth, so necessary for the mastication of food, are rarely attended to; the eyes are permanently injured for the want of glasses; the ears may be opened by a simple operation to the throat or nose; and yet, for want of proper medical advice, these are permanently injured. Such defects frequently make the pupils appear stupid, and the doctor and I have to refuse these applicants for admission to the special classes. At the same time I feel the necessity of further power to deal with cases of this nature.

Our pupils are just on the borderline between the normal and the abnormal. Dr. Shuttleworth defines the feeble-minded as those children whose mental endowments are so poor or so peculiar as to render them unfit for the ordinary curriculum of the Poor Law school, though they may not be disqualified for family life at home. I find these children in some cases possessing exceptional gifts—one has a good eye for colour and form, and both paints and draws well; another can calculate rapidly and accurately; others model objects in clay; some read and cannot calculate; and others,

again, are so lethargic that they require great effort on the teacher's part to induce them to take an interest either in mental or manual occupations.

At first there was a very natural objection on the parents' part to allow their children to attend these classes ; they will not admit that there is any brain trouble, only that the child is dull and just queer at times, and very aggravating at times, which they seem to think can be cured by a good 'thrashing.' A couple of weeks ago a girl was brought to me who was twelve years old, and was more imbecile than the child usually admitted, and whilst I was hesitating as to her admission, the mother said: 'Her father says she's been to that school for over seven years, and she ain't learnt nothing, and why should she leave now?' She must in a short time become an inmate of our institution.

The teaching in the classes is objective throughout—each teacher has about twenty pupils who are instructed in Scripture, reading, writing, arithmetic, singing, recitation, drawing, colour work, varied occupations, including many kinds of fancy work, modelling in clay, and basket work. If the pupils remain after fourteen years of age, more extended forms of manual work must be taught, especially for the boys. Our older girls learn cookery and laundry work, and I am looking forward to their training in the housewifery classes which the Board are now starting.

Roughly speaking, the pupils can be classed in three divisions: (1) Those who profit by the special training sufficiently to return to the normal school, and will become self-supporting; (2) those who are very feebly gifted, but can be taught sufficient to make them partially self-supporting; (3) those so incapable that they should be removed from their families and placed

in a home where they would have lifelong guardianship, for there is no doubt that the will power and moral control of such are so weak as to make them a positive danger to society.

I prefer the child as a pupil at seven years of age, when the character is plastic and more easily moulded, and when it can therefore more profitably benefit by its course of training. The teacher must be clever and patient, fond of children, and with sufficient knowledge of psychology to know how best to treat the mental dulness and various abnormalities of each pupil.

The schoolroom should be large, airy, and well lighted, plentifully supplied with good pictures, and a piano to aid in the singing and drill exercises. Common objects should abound, and the furniture should be simple in make to avoid accidents. Always an open fireplace where a fire could be readily lit, as so many have feeble and low circulation and rapidly feel a falling temperature.

Attached to each school there should be special managers, who by their sympathy and interest in the work could encourage both teacher and pupil. In a few instances there are now ladies who visit the homes, send the children to the country, advise the parents as to medical treatment, even going themselves to the hospital with them, and providing suitable situations when they leave school.

Next week a 'Guild of Old Scholars,' through the kindness of a lady manager, is to be opened, and thus we hope to keep in touch with our pupils, so as to not only assist them, but to be able justly to estimate the value of the movement. On the roll at the present time it is estimated that 528 will become self-supporting, 355 partially self-supporting, and 146 utterly incapable.

It is this latter class for which further provision must be made.

Mr. Diggle, in a Presidential Address, says: 'Care for all children as children, and not for the apparently strong and useful of their number, is the outcome of Christian civilisation. We do not look upon them merely as the means of perpetuating the human race. In the weakest and frailest amongst them we discern the latent capacity for a higher life, and precisely because in their case the physical organism hides rather than exhibits the true child, the duty is more clearly laid upon us of assisting the child to break through the barrier of hostile physical defects. In the performance of that duty the State has learnt to place a right value upon even imperfect human life, and the laws of Christian communities increasingly reflect in that regard the common sentiment of their peoples.' The object of all education is to give a full and happy life, and so its blessings have gradually during the past sixty years very justly been extended to the humblest child, and no one ventures to ask, Is this poor life worth saving? but, How best can we succour its weakness and relieve its necessities? More schools, similar to the Royal Albert at Lancaster and the Earlswood in Surrey, are urgently needed for the training of the higher imbecile, and small residential homes for those sufficiently capable to be taught a trade or trained as servants. Voluntary effort is needed for this, for it is England's boast that

> The dreams of yesterday are the realities of to-day:
> New occasions teach new duties.
> Time makes ancient good uncouth.
> They must upward still and onward
> Who would keep abreast of truth.

E. M. BURGWIN.

The Children's Guild of Play

A charming demonstration was given by the children of South London, members of the Guild of Play, under the direction of Sister Grace, to whom the Guild owes its origin. The following paper was read by her in explanation of her work :

The Guild of Play is a new comer to the realms of philanthropy and education. 'I pray you, therefore, as a stranger, give it welcome.'

Sister Grace

A month ago, at our Settlement May Festival, we appealed to the philanthropic world. We had no need of words ; the happy faces of the children told their own story and pleaded their own cause. Everyone loves to see the happiness of little children, and we are sure we have only to make ourselves known to win sympathy, and perhaps help.

But to-day we appeal to a smaller audience, and we feel that here there is some need for us to explain and

justify our existence. We plead for the recognition of our Guild from an educational point of view.

If we trace the history of education we shall find that in early stages of society there was little or nothing, in a technical sense, of what we call education. Children, in their play, mimicked the work of manhood, and, through their mimicry, learned their life-work.

It is only gradually that education became separated from life. Even in Athens, in the time of Pericles, there were no public schools, and the sons of her noblest and richest citizens were taught nothing but gymnastics and music (music including the repetition of poetry, and chiefly the poetry of Homer)—in other words, games and fairy tales.

That was the Gentile theory of education.

In Florence, to quote Mr. Ruskin, 'the traditions of Faith and Hope of both the Gentile and the Jewish races, met for their beautiful labour: the Baptistery of Florence is the last building raised on the earth by the descendants of the workmen taught by Dædalus; and the Tower of Giotto is the loveliest of those raised on earth under the inspiration of the men who lifted up the Tabernacle in the Wilderness.' And in the Cathedral of Florence is what Mr. Ruskin calls the Vaulted Book, whereon are painted the seven Earthly and the seven Heavenly Sciences that formed the old Florentine system of manly education. The first of these seven Earthly Sciences is Grammar, more properly the 'Grammatic Art,' the art of Letters or Literature, the art of faithfully reading what has been written for our learning, and of clearly writing what we would make immortal of our thoughts. And to the old painter, with his wild, weird, mysterious Etruscan instincts and ancestors, Literature meant the Bible, legend, poetry, myth—it

meant essentially imaginative literature—fairy tales, 'an' it please you.' That was the theory of education in the middle ages.

Again, in our great English public schools, the larger part of a boy's time has always been fairly divided between games and classics, the study of the classics meaning, until the last few years, acquaintance with the great thoughts of great writers, hidden for the most part in—fairy tales.

I would especially remind you also that not only as much time, but as much instruction, has been given to games as to the classics.

These instances have been taken somewhat at random, but I think we shall always find that at the time when the national life of a country is purest and noblest and healthiest, its system of education has always recognised the importance of training, both the body and the imagination, by games and fairy tales. We have spoken of the noble training given in our own old public schools for boys. And in the best girls' schools, even of the much-maligned old-fashioned sort, dancing and walking and riding have always been taught, and now one hears of hockey and even cricket clubs,[1] although girls are not often taught how to play—they are generally left to pick up games in the best way they can.

And if the wisest men of all ages and races seem agreed that children who come from the best and most cultured homes not only need to play, but to be taught how to play, what shall we say of the children who throng our Board schools? And what of the children who crowd our slums?

This is the justification of our Guild of Play.

[1] See *Facts for Women.*

Games and fairy tales are both instances of Plato's noble fiction,' by which men's minds must first be opened; under the veil of which, truth is half revealed and half concealed; while men's spirits are as yet not fitted to look upon the unveiled face of truth.

> For, don't you mark? we're made so that we love,
> First when we see them painted, things we have passed
> Perhaps a hundred times, nor cared to see;
> And so they are better painted—better to us,
> Which is the same thing. Art was given for that.
> God uses us to help each other so,
> Lending our minds out.

The first steps toward the solution of the terrible child-problem of our age lie in understanding the facts that go to form the problem; then (as the children sing)

> May we ever
> Keep the end of life in view.

Life is daily becoming more complex, more difficult. It is useless to attempt to solve its problems before facing its facts, its possibilities, its limitations. It is worse than useless to attempt to develop odd bits of a child's nature, regardless of the other bits, and we all know the worth of hothouse goodness. The conditions of life for our street children imply, roughly speaking, all the physical ills that are the natural consequence of insufficient food, clothing, and water, bad air and unhealthy parentage; the mental ills arising from utter lack of mental training for many generations, and intelligences stunted from physical causes; and, lastly, moral ills due to the lack of home life, and of home and religious training. Seriously handicapped little lives truly! But, on the other hand, the most uncared-for gutter-child has a goodly heritage in his instinctive perception of goodness, his big trust, his clear judg-

ment, and his high standard, a heritage that lingers long even in Bermondsey. How are we to help these little ones to 'lay hold of life' and to know that

> This world's no blot for us
> Nor blank; it means intensely, and means good?

How are we to help each one of them 'to be on earth a poem of God's own making'? We believe the answer is to be found in taking up a little bit of the children's life and living it with them, helping them to spend that fragment of time as well as it is possible to spend it, simply starting them on right lines.

All day the children are subjected to the strictest discipline in school, where their brain power alone is exercised. All day each child learns, or does not learn, his or her own lesson. If our work is in any way to supplement this education and strengthening of all the instincts and capacities of the child, it must clearly at least take thought of physical as well as mental culture; culture of imagination as well as intellect; of *self*-rule as well as discipline; of the future and unseen as well as of the present and the seen; of the heart as well as of the head.

We shall find that words and precepts are of little avail. In spite of their strange, strong grip of the unseen world, children cannot grasp abstractions unless they are translated into action or the 'noble fiction.' When children are practical they are very practical. They can understand little or nothing of the poetry of motion and the benefits of 'working in unison,' but they love to fling themselves about, and are quite capable of seeing that it takes many children to make a good game, and that if *one* fails to do her part properly the game is spoilt. Also they are capable (little

slum children though they be) of seeing and of acknowledging who 'jumps lightest,' and of offering to give up some highly prized part—'Old Roger,' perhaps, or 'Poor Jenny Jones'—to a child who 'can do it better.'

These are some of the reasons why our Guild of Play means chiefly quaint old song-games and fairy tales.

By means of the games children unconsciously learn to control themselves, otherwise play could not go on. Unconsciously they moderate their uncouth gestures, unconsciously their faces grow gentler, their voices less harsh, their backs straighter, their eyes more frankly clear.

And fairy tales are like clear, salt-laden winds from the sea: of a truth they do work on one's imagination. They bring to us the power of 'seeing things,' the power of seeing visions and dreaming dreams. They make straight the paths for the ideal that is fighting out its life for each one of us.

These are our visible means.

Beyond and behind and above them is the great force of Personality. This is the age of the individual man, whether for weal or woe we know not, but the fact is there and we begin to recognise it.

We recognise the great Apostle of Christ in the man who summed up life's true gifts in the words, 'The greatest of these is love;' we think of the mediæval priest who prayed for his children that they might become 'fit to love;' we hear the verdict of the modern man of science that 'love is the greatest thing in the world;' and there comes to us the knowledge that unless we can give away love—the essence of personality—our efforts will avail us nothing. If we want to 'work out the beast, work in the man,' we

•FAIRY•TALES•
•TELL•IT•AGINE•

must appeal not to this or that sense, nor to this or that salient trait in a child's character, we must go straight to the little child pure and simple that lies hidden, fresh and clean, deep under the Bermondsey crust. We must try to win the children's love.

The Guild of Play provides just such an opportunity for this personal influence.

It is a glorious thing to give children happy hours, but if at the same time we can help to make life—ordinary, hungry, toyless life—beautiful and good to them, if we can help the tiny seeds of love and faith and hope and self-control to grow, if we can lure forth ideals, surely *that* is true education.

The Demonstration then commenced.

As the doors of the Lecture Hall opened fifty little girls dressed in old-fashioned, high-waisted, blue cotton frocks, and quaint blue caps, came dancing in two-and-two with uplifted hands and tripping steps to some old dance measure.

'Sit,' came the word, and instantly fifty pairs of legs were lost to view.

From their brisk order and quaint unstudied gestures one would hardly have suspected that these children represented one of the poorest waterside schools. Many of them had been chosen by the teachers for the free School Board dinners during the previous winter; many have but one room to call home.

When the clapping ceased the children rose to begin a somewhat random programme, largely chosen by themselves, after serious talks about the likings of 'grand lidies;' and culled from Mrs. Alice B. Gomme's collection of singing-games.

It will be seen that the traditional element in the

games has a distinct value, and that as children's workers we should gladly clinch all links that may bind the present to the future and the past.

'London Bridge is broken down' is perhaps the most popular of all the song-games, and with it we began. We live in the world of docks, and the building—if not the holding—of bridges is an ever-present allegory. Knowing the old legend of the foundation sacrifices, even the children felt the grim humour of the situation when the nodding caps almost touched each other as their little wearers curtseyed to 'my fair lady.'

When 'my fair lady' was safely in prison, the long lines melted into circles, which whirled round to the strains of 'Here we come looby loo,' a game obviously a survival of the old antic dances when every animal was a little brother, and every tree the haunted home of some one too big for houses.

After a moment's gasp for breath came an ancient, dramatic rendering of a funeral, the sequel to the woes of 'Poor Jenny Jones,' who, hidden from her many suitors behind her mother's widespread apron, which was starched and washed and ironed, sickened and now lies dead. The serious, matronly ways of the tiny 'Jennies' never fail to make a strange appeal.

'Old Roger' is another great favourite. To quote Mrs. Gomme:

'The interest of the game, is that it is not merely representative of a funeral, but more particularly shows the belief that a dead person is cognisant of actions done by the living, and capable of resenting personal wrongs and desecration of the grave; it shows also the sacredness of the grave.

'It shows clearly a survival of the method of portray-

•OUR•FATHER•WHICH•ART•IN•HEAVEN•
•PLEASE•
•MAY•WE•GO•
•INTO•
•THE•COUNTRY•

ing old plays, the ring of children act the part of *chorus*, and relate the incidents of the play. The three actors say nothing, but only act their several parts in dumb show. A raising and lowering of the arms on the part of the child who plays "apple tree," the quiet of "Old Roger" until he has to jump up, certainly shows the early method of actors when details were presented by action instead of words. Children see no absurdity in being a tree, or a wall, or an animal. They simply are these things if the game or the play demands it, and consequently they think nothing of incongruities. It is not, of course, suggested that children have preserved in this game an old play, but that in this and similar games they have preserved traditional methods of acting and detail, as shown in an early and childish period of the drama. All will remember how Shakespeare uses the same idea in "A Midsummer Night's Dream."'

After sundry similar games, the programme ended with 'Oats and Beans and Barley,' the old farming game which had its origin in the feasting, dancing, and courting at Harvest Festivals long ago. For days afterwards we were haunted by its lilting chorus:

> Do you, or I, or anyone know
> How oats and beans and barley grow?

Then, two by two, with dainty tripping steps, the children went away, as they had come.

If we may judge from their faces, the audience shared with us the thought now deepened into a conviction that 'children's education must begin with their play.'

SISTER GRACE.
E. B. TAYLOR.
Bermondsey Settlement, S.E.

II

SOME PROFESSIONS OPEN TO WOMEN

MRS. HENRY FAWCETT took the chair at this meeting of the Education Congress, and remarked that it was no part of her intention to pretend as chairman to be impartial on such a subject as 'The Medical Education of Women in England and India.' 'I look upon the opening of the medical profession to women as one of the very greatest blessings which has marked the later part of this century, a blessing to women who in illness are able to call in the attendance of physicians and surgeons of their own sex; a blessing to women, to whom a noble and most useful profession has been opened. I am not impartial on this question either on public or on private grounds, for amid my rejoicing in this matter, I have a private source of satisfaction connected with it, in the fact that some of the earlier steps and some of the most important steps in opening this profession to women fell to the lot of my sister, Mrs. Anderson, to accomplish. She and Dr. Sophia Jex-Blake and Dr. Elizabeth Blackwell will, I think, always be looked upon as the pioneers in the movement for opening the medical profession in this country to women.'

Mrs. Henry Fawcett

The chairman then called upon Mrs. Anderson to read her paper on

Medical Training of Women in England

I have been asked to explain the present state of things as regards the medical education of women in the United Kingdom.

I will not detain you with any considerable amount of 'Ancient History.' Everyone here probably knows that thirty or thirty-five years ago it

Mrs. Garrett Anderson, M.D.

was not possible for women either to study medicine in anything but an amateur way, or to obtain admission to any of the Medical Examining Bodies in order to obtain a degree as a qualified practitioner. If a woman wished, say in 1863, to study medicine she was face to face with two difficulties—she could not *get into a school*, and even if she could the *Examining Bodies would not* let her present herself for examination.

Gradually these two difficulties have been removed, and at this moment there are in Scotland, Ireland and England *six* Schools of Medicine, at which women can study with men, *four* other Medical Schools for women only, six Universities in which they can take the M.D. degree, in addition to the College of Physicians and Surgeons of Edinburgh and Glasgow, and of Dublin, and the Apothecaries' Hall, London. There is therefore now no more difficulty in the way of a woman taking a medical qualification than there is in the case of a man. For both there are difficulties, but they are intrinsic. The students have to acquaint themselves with a large amount of detailed knowledge on a variety of subjects, failure to pass an examination is always possible, but women and men stand on the same platform and have to go through the same course, pass the same examination, and receive the same degrees. It is happily not in Medicine, as it is in the study of Greek and Latin and Mathematics, that, though men and women are allowed to follow the same course and pass the same examinations, it is thought necessary to refuse to women the reward of work well done which is given to men. In medicine, the course of study, the examinations, and the degrees are all identical for men and women.

It will perhaps make the conditions of medical

education more intelligible to all present if I imagine a young woman with a turn for study and some ambition in the direction of making herself pecuniarily independent, going to her father and telling him that she wants to be a doctor.

If he is a good father, he turns this request over in his mind, and thinks, first of all perhaps, whether his girl has shown signs of possessing the qualities that make for success in any line. Has she fairly good brains, and, what is of even greater importance, can she stick to things till they are done, or is she easily diverted from one thing to another, or is she too fond of amusement to make it likely that she will persist in a course of hard work for five, six, or seven years? Then in many cases he will think of the cost of such an education. Being a good father he has long ago realised that it is his duty either to leave his daughter enough money to live upon comfortably or to train her to earn an income for herself. Perhaps he knows that at his death 150*l.* a year, or not much more, is all that she will have. He *thinks* she will very likely marry, but he knows very well that a great many women do not marry, and he considers '150*l.* or 200*l.* a year is a very small sum for me to leave this nice girl of mine to live upon; but if I spend a little capital now, I can help her to earn 500*l.*, 700*l.*, or 1,000*l.* a year, and the money will be much better invested than by putting it into Consols.' So as a prudent man of business he begins to favour the idea. Then he asks himself how such a life will suit her health; he makes inquiries and he finds that women studying medicine have better health than average young women, and that if they are sensible in their mode of life, and if their parents arrange wisely and liberally for them, they become as a rule stronger

and stronger each year, and that cases of breakdown from overwork are exceedingly rare among them.

Satisfied on these points, he then wants to know what the course is, how long it will take, what has to be done, and how much it will cost? The answers to these questions can only be given when the father and daughter have decided one very important point, and that is, what degree or diploma she is to try to obtain.

I am in the habit of saying to intending students or their friends who consult me at this stage, 'If you are going to Rome and wish to get your tickets through Cook, you must first of all make up your mind as to the route you intend to take. You *must* say if you mean to go by Paris, or by Bâle, Lucerne and Milan, or by steamer to Naples and thence to Rome.'

So with studying medicine; you must decide upon *your route* as the very first step, because from the beginning the different routes vary. In every case an Arts Examination must be passed before registration as a medical student, but the range of this examination varies immensely with the different diploma-giving bodies, and the preparation for one Arts Examination would not necessarily be what would do for any one of the others. So the first practical step to be taken is *to choose your route*. What diploma are you intending to get?

The range of choice, as I have already said, is considerable.

In this diagram[1] I have placed the nine examining bodies, as nearly as may be possible, in the ascending order of difficulty, the Apothecaries' Hall being at one end of the scale, and the University of London at the other.

[1] Unfortunately not available for reproduction.—Sub-Ed.

The relative difficulty of the examinations which lead up to the nine medical diplomas open to women is, of course, only one point to be considered. The fees vary as much as the difficulty, and as a rule inversely to the difficulty, which is as it should be. Then there is the geographical consideration. Students in Ireland would almost certainly elect to go for the Irish colleges or for the University of Ireland; students in Scotland naturally go for the licence of the Scotch colleges, or for the M.D. degree of one of the Scotch universities. In London, students have the choice between the first and the last of the nine examining bodies, if they wish to be examined there.

The Royal Colleges of Physicians and Surgeons are not yet open to them.

If a student wants the M.D. degree, but is not prepared to attempt to obtain the London University degree, she must go to Durham or to one of the Scotch universities for part of her course, and for her examinations, or she can take the L.S.A. and then go abroad for an M.D. degree.

Having decided which degree or diploma the student will try to get, and having passed the necessary Arts Examination, the next point is to decide where she will study.

Shall she go to a mixed school, one in which men and women study together in whole or in part, or into one of the schools for women only?

As in the case of choosing the examining body from which she hopes to obtain a degree, the student will be very much influenced in her choice of a school by questions of convenience and economy. A young woman in Aberdeen, for instance, will naturally go to the medical classes at the Aberdeen University and

continue to live at home, unless she and her parents greatly prefer her going to a school for women only. If they do she will have to leave home and to go where there is such a school.

There are certain obvious advantages about the mixed schools. They decidedly tend to be cheaper than the separate schools can be.

The chances are, too, that where very expensive apparatus is required for teaching, as, for instance, in physics, chemistry, and physiology, a small school for women only will probably not be as well provided as a large mixed school will be. The working plant of an efficient medical school costs a very large sum of money, and it is not so likely to be provided for a small number of women only, as for a large number of men and women. Moreover, a mixed school is always likely to command the services of the best teachers.

In many cases, no doubt, the teachers in a women's school are also teaching in a men's school; but where this is not possible the most valuable teachers are sure in the end to go to the school which can give them most for their services.

On the other hand there are very solid advantages from the students' point of view in the separate schools. If the school is large enough to be able to supply expensive apparatus and good teaching, the life of the students tends, I think, to be much freer and happier in a school for women only than it could be in a mixed school. In a large school for women only the students have a considerable range of choice in which to find congenial friends; they have their Tennis Club, Dramatic Club, School Magazine, Common Room Debates, luncheons and teas together; they have Libraries and

Reading Rooms ; they are a corporate body in the truest sense.

Personally, I think the advantages of the separate medical schools for women, if they can be large enough to be well equipped, greatly outweigh the disadvantages. I went through the experience of being the one woman in a men's school, and I look back upon that time of my life with great sympathy and compassion for myself, for it was so intolerably dull, as I was perhaps an ultra well-behaved young woman, exceedingly shy, and oppressed with my own peculiarities. I had no companionship, absolutely none, and no gaiety.

Another consideration in choosing a school is how far the course of teaching in any particular school has been adapted to the requirements of the examining body to which the individual student proposes to present herself for examination. In a broad sense the course of instruction at all the medical schools is the same, it is imposed by the regulations of the General Medical Council.

Anatomy, physiology, chemistry, surgery, and medicine are taught in all, but the standard in each subject varies enormously, and it adapts itself to the standard of the particular examining body to which most of the students intend to go.

For instance, the amount of organic chemistry and of physiology required by the University of London is immensely more than is required by any of the other examining bodies, so that a student aiming at the London degree must study where the requirements of the London University students in these subjects have been carefully considered and liberally arranged for. Then, again, in the later part of the course the London University requires the student to attend very few

lectures, the idea probably being that at this stage they learn more in the wards and from reading than from lectures. But on the other hand the Scotch universities insist upon attendance at very long courses of lectures (100 lectures instead of the seventy provided in English schools). No school can afford to provide, say, thirty extra lectures in each course to meet the want of a very small number of students, unless these students are prepared to pay the extra cost of such lectures.

The school must then be chosen with a view to what is wanted by the examining body to which the student is going, and the students who aim at the degrees of the London University would go to the school which prepares the largest number of students for these degrees.

From the student's point of view, it would be unreasonable to expect that she would have as good a chance of passing an examination of special difficulty from a school where she was perhaps alone in aiming at this examination, as she would have if the school sent up every year to this same examination ten or a dozen students, and adapted its work carefully to their requirements.

The number of women in the mixed schools is much smaller than in the schools for women only, so that parents and guardians and the students themselves appear to agree with me in thinking the balance of advantages is on the side of the separate schools. It must, however, never be forgotten that there is no separateness as to examinations or diplomas.

The proposal to found a Women's University would certainly find no favour with medical students. With six universities and three other examining bodies open

to them, all of which they share with men, it is perfectly certain that no woman wishing for a medical degree would betake herself to a new Women's University to get it. It is, however, needless to say more as to the demerits of this particular scheme. It has never been alive, and it may now be quietly buried.

The young woman having chosen her school, should now register herself as a medical student at the General Medical Council in Oxford Street. The year begins on October 1, it is divided into the Winter Term of six months—October to the end of March—and the Summer one of three—May to end of July—April, August, and September being holidays. Students often begin with the Summer Term; they are more ready to make use of the winter by doing so, and the time is by no means wasted. Having begun, they have to be at the school by 9 A.M., and to give up all their time to the work. It is quite useless to think of doing anything else at the same time. Some women try to teach or to support themselves in other ways while studying; it is a great mistake; they generally fail both in work and health. The practice of medicine is not a suitable profession for a woman who has great difficulty in living while she is a student. She will probably live too poorly to remain in good health,[1] and when she has taken her diploma she cannot expect *instantly* to make enough to live upon.

It is a very great drawback to her then if she is too poor to start in a respectable-looking house and to pose as a person of professional rank. Five years must

[1] Mrs. Anderson condemns the 'Bun and Coffee' lunch, in which students often indulge. She says it 'spells failure and means ruin;' and that those who cannot afford meat in the middle of the day are bound to break down, and should not therefore attempt to take up medical work.—SUB-ED.

elapse between registration as a student and registration as a medical practitioner, and during this time she has to pass a series of examinations, varying in number and difficulty according to the degree she is seeking. Naturally the more examinations there are the easier they are. It is more difficult to pass a stiff examination in four subjects at once, than it is to have four examinations on one subject at a time. Many people, whose heads are big enough to hold one subject pretty well, are quite unable to hold four subjects at once, and if they try to do what is beyond their powers they may waste ten or twelve years struggling with examinations from which they get nothing but misery.

The philosopher's axiom, 'Know thyself,' is never more true than in this matter of examination. The attempt to put a quart of gooseberries into a pint mug is bound to be a failure. I am in the habit of saying to students who propose to aim at the London degree, 'Work diligently and honestly at the Matriculation Examination. If you fail *once*, you had probably better aim at something humbler; if you fail *twice* there is no doubt about it. Life is too short to spend ten or twelve years over examinations for anything.'

Having done with their examinations the students have to set to work to acquire some practical knowledge of their profession; they have already learned a great deal, the important thing now is to assimilate it. To learn to manage people is quite as important a part of a doctor's profession as managing their disease. To do this it is well that they should obtain posts in different hospitals and asylums, as house surgeons and medical assistants.

I think you will like me to say—it is rather a delicate business, and I do not like to speak too definitely—

how they get on afterwards. Well, I will venture to say that they do not starve. Of course there are failures, but if medical women have the qualities which make for success in anything, and they have really learned their profession, they can make a very good income in a very moderate time. It must always be borne in mind that the great majority of women who propose to study medicine do it with the view of making a living; they have to live, and it is a very desirable thing that more ways of living—not the most penurious ways, but those which will make a reasonably good income—should be opened to women, and it is from this point of view that the addition of the medical profession to the possible pursuits of women is exceedingly valuable. I think I have now said all that I am prepared to say upon this subject.

ELIZABETH GARRETT ANDERSON.

Mrs. Stanley Boyd, M.D.

The discussion was opened by Mrs. Stanley Boyd, M.D., who considered the question of age in which a woman should enter a medical school a most important and difficult one. She deprecated very strongly, and from a wide experience, the practice of sending a girl straight from a high school or even a college to begin her medical training, on the ground that the necessary amount of experience and wider culture to enable a woman to deal successfully with her fellow-creatures could be best attained before entering the medical school. It was an incalculable advantage to a medical student to possess a knowledge of art or literature and a wide view of general questions affecting women. The more she knew of her fellow-creatures, sympathised with them, and thoroughly understood the forces at work upon their lives, so much

the better, and more wisely, would she be able to treat them when she was qualified. Mrs. Stanley Boyd considered that the present system of 'cramming,' so much in vogue in high schools, tended to give a girl only a certain amount of *knowledge* without any real *education*, and without any real grasp of English literature and classics, and no general culture.

The speaker emphasised Mrs. Anderson's remarks on the absolute necessity of a medical student giving her whole time and attention to the work; this needed self-sacrifice on her part, and also on the part of her friends. For this reason it was often easier for a girl not to live at home during her student-life, but to go where she would be allowed the full development of her own life and her own studies, and to work in her own way, as not unfrequently the conflict between the duties of her profession and the duties to her family caused severe mental suffering to a conscientious girl.

Mrs. Stanley Boyd was not inclined to place the pecuniary question in such a rose-coloured light as Mrs. Anderson, unless the typical father realised that he must also set aside sufficient to start his daughter in her first year, that is enough to pay her rent and to furnish a house, because a girl had so little means of earning money before she set up for herself in practice.

Mrs. Garrett Anderson, in reply, still maintained her opinion that it was best for students to begin the science part and go through their examinations immediately after leaving school, because it was easier to get the mass of facts into their heads before seven or eight and twenty than afterwards, the mind being much more receptive and the memory strong and powerful. She thought that culture, pleasure and reading, and acquaintance with their fellow-creatures would come

later on. She fully corroborated Mrs. Boyd's remarks as to the necessity of the father helping his daughter for the first year or two, as it was a very creditable thing for a young lady doctor to earn 100*l.* or 150*l.* for the first year, and on that sum she could not live and also furnish a house.

The Chairman then called upon Mrs. Scharlieb, M.D., to read her paper.

Medical Women in India

Mrs. Scharlieb, M.D.

Twelve years ago I was asked by the Madras branch of the National Indian Association to read a paper on the subject of Medical Women in India. At that time the chief interest lay in the future; there was no past to record, and the present was very limited. Lady Dufferin's scheme had not been developed, only an inaugural meeting at the Mansion House had been held in October 1895. Miss Edith Pechey and Miss Ellaby were at work at the Cama Hospital, Bombay. Miss Butler, the pioneer medical missionary, was at Bakhulper, and I in Madras. This, I think, was the list of women doctors in India, except a few American medical missionaries who were doing a good work in various parts of the country, but who were not on the British nor the Indian registers.

The supply of women doctors for work in India is chiefly drawn from women educated in the medical schools in India and women educated in the British medical schools. They are maintained—

1. By the Government and Local Funds' Boards.
2. By the Dufferin Fund.
3. By Missionary Bodies.

It is very difficult to give the exact numbers of

medical women working in India, but from the Government reports for 1895 it seems that there are many scattered about the country; that they are doing good work is shown by the increasing attendance of women and children at the hospitals and dispensaries officered by women, and from the evident desire of the different medical inspectors to have more of them.

The report of the Dufferin Fund for 1896 gives the numbers of medical women working in 'female hospitals, wards, and dispensaries more or less directly under the Fund as eighteen lady doctors, first grade, fifty-six assistant-surgeons, second grade, fifty-two hospital assistants, third grade.' The eighteen medical women of the first grade have all qualified in Great Britain and are on the British Medical Register. The others are Indian born and Indian educated, of many nationalities, castes, and creeds. During the year 1895 about 1,054,387 women were treated by these 126 medical women.

From the 'Medical Missions' report I find that thirty-five fully qualified lady medical missionaries were at work in India. Altogether about 200 medical women are now there, which is an immense advance on the four who represented the nation's conscience in this respect ten years before.

This advance is the more remarkable because medical women—like line-of-battle ships—cannot be made in a day: no matter how anxious we may be to have them, they cannot be bought ready-made; their manufacture is tedious and costly. When the women who are now training are launched we shall have a still grander result to show; meanwhile we may thank God and take courage.

Medical education at home is given to women by

the London Royal Free Hospital School for Women (formerly the London School of Medicine for Women).[1] This is the oldest and largest school of medicine for women only, having been opened in 1874. 519 students have been entered on its books, of whom 220 qualified and are on the British Register;[2] during the last year it has had an entry of sixty-two new students. Besides this there are schools of medicine for women in Scotland and Ireland, and one at Newcastle.[3] Women are admitted to qualifying examinations by the Universities of London, Ireland, Edinburgh, and Durham, also by the Irish and Scotch colleges, and by the Society of Apothecaries in London.

Up to the present time the Royal College of Physicians declines to admit women, and as their examinations are conjoint with those of the Royal College of Surgeons, this latter body is unable, although willing, to admit women.[4]

In India, medical education is given to women in the Medical Colleges of Madras, Bombay, Calcutta, Lahore, and Agra, and by the North India School of Medicine for Native Christian Women at Ludhiana.

Madras has the honour of being the first city in the Empire to provide women with medical education, and four women entered for its curriculum and qualifications in October 1875. The Ludhiana school is especially interesting as being the first effort to teach native Christian women in a school founded expressly for them and officered entirely by women professors.

[1] See *Handbook to Education Section*, article by Mrs. Thorne, p. 159.

[2] Of the remaining 299, some students have not completed their five years: some have qualified abroad: some gave up: and some only entered for single classes.—SUB-ED.

[3] See Descriptive Chapter, pp. 7, 8.

[4] Mrs. Anderson, p. 89.

Judging from personal experience as a student—and later as a professor—at the Madras Medical College, the system of instruction in the Government medical schools of India is good, but the teaching capacity of the professors is unequal, and the students suffer from the frequent changes of teachers, necessitated by the fact that they are usually military medical men, very liable to be transferred suddenly to another appointment. In endeavouring to supply female medical aid to the women of India, we are at once met by difficulties.

First, the impossibility to provide for the millions of sick women with the small number of medical women available.

Secondly, the financial question. Medical women must live, eat and drink and be clothed; few of them have independent means, and the resources of Government and of private societies are limited.

Thirdly, it is difficult to decide who are the best women to send as doctors among the women of India. Should they be educated in Great Britain, or should they be country born and country educated? With regard to the first difficulty—*the want of proportion in the numbers*—that is a trouble that would slowly and surely mend itself. If the women doctors are really useful and acceptable in their work, there will be such a demand for them as will gradually produce a full supply. During the last ten years their numbers have increased a hundredfold, and every year raises the ratio of women qualified and eager for the work.

The financial question is probably the gravest, and yet it should not be. The chronic starvation of hospitals, missions, and of all schemes of benevolence seems to depend on the fact that we cannot put aside

the idea that even small contributions are valuable and that every pound is composed of shillings. If all people would give a tenth of their income there would be money enough and to spare for philanthropic purposes. We are told that practically all the money given for these purposes arises from some forty or fifty thousand individuals only, the rest of the well-to-do classes contributing an inappreciable fraction.

It really would seem as if people might be stirred up to a sense of their duties and privileges in this respect. Leaving the general subject of providing for the sick and needy, let us think of the provision of medical women, nurses, servants, medicines and hospitals for women in India.

In this special time of national heart-stirring with the glories of the Jubilee and the sense of Imperial power on the one hand, and the heartrending stories of famine, plague, and earthquake on the other, can we not all resolve to set aside a yearly sum which we will give to alleviate the sufferings of women and children in our Indian Empire? No one can say it is not their concern. If India were not at once our pride and our despair—if she were the possession of any other nation —the cry of her women and her little ones would still arrest our attention; but being as she is, so peculiarly dependent on us, it amounts to a national sin to harden our hearts and to pass by on the other side. We have taken possession of the land, we have ousted her old rulers, and in assuming their inheritance we have also assumed their duties. Among these the care of the women and children, the enforcement of sanitation and spread of elementary education are obvious. We think that we are doing a good work in India, we believe that our rule is beneficent, we hold that our laws, our

medicine, and our religion are vivifying and regenerating forces. So they are; but we must have a care lest, while we destroy the governments, the laws, the medicine, and the religions of the past, we do not leave India in a chaotic transition state, without even the modicum of well-being she formerly enjoyed.

The Government of India is alive to its duties and recognises the magnitude of its task, but there is much that we can do to strengthen its hands and to supplement its efforts.

This is the 'Woman's Era.' While we celebrate the Jubilee of our great and good Queen, while we note with thankfulness the wonderful advance of women in political position, in education, and in medicine, cannot we, the women of the happiest and freest of lands, promise to contribute a yearly sum towards the provision of medical aid for the women and children of India?

There can be no feeling of disapprobation either of the object or of the means employed. We all desire that sick women shall be healed and hopeless women comforted; and as to the means, there are Christian missions of every shade of opinion, and the Countess of Dufferin's Fund, unsectarian but not non-Christian.

The third difficulty—how to choose the medical women for India—is a problem that demands very careful consideration, but it is not insoluble. There are advantages and disadvantages on both sides. A medical woman, educated at home and holding a superior qualification, such as a University degree, has not only a better professional education, but has also received mental discipline and a certain moral training that fit her to reason correctly, to act promptly, and to acquire influence over her subordinates and patients.

Such a woman has probably the gifts of her people. She will be brave, firm, self-controlled, and a devotee of duty. She will possess a sound constitution in mind and body, and will probably be filled with an enthusiastic desire to work among her Indian sisters and to serve the cause of medical science in the land of her adoption. Her disadvantages are ignorance of the peoples of India, with their languages, customs, creeds, and modes of thought; a temptation to think all to which she is accustomed good, and all she does not know bad or trivial. She will have to work in a trying climate, in novel and not always pleasant circumstances, and with colleagues other than those she would probably choose. Another grave disadvantage is that she is an expensive luxury; the sum required for her outfit, her journey, her maintenance in India, and her necessary holidays is large. Indeed, for the same money as must be paid for one European worker, four or five native workers can be maintained.

The advantages belonging to a native lady trained in India are that she knows to some extent the language, the religious feelings, the customs, and the ways of the women among whom she works, if she is sent, as she should be, to her own part of the country. During her training she will have studied disease as it is modified by local influences, such as climate, diet, local constitutions, and such like. Intellectually a native lady may be the equal of her Western sister in natural gifts, and in many cases she is fully as keen a student. Naturally she is more likely to show gentleness and ready adaptability to circumstance than we can boast of, but the power of self-control and the faculty for organising and governing are seldom strong. It is impossible to judge the very different races of the north and north-west

from an acquaintance with those to be found in Bengal, in Madras, and in parts of Bombay.

Probably when the daughters of the Sikhs, the Malvaltes, and other hardy tribes are educated we shall find in them a more energetic and sturdy strain of women. Even now there are exceptions, and in women like Rukhmabai [1] we find a happy union of the Eastern and Western characteristics. The Indian-born woman has an advantage in residing in the climate to which she is accustomed, and in circumstances which are natural to her; her simple habits of life enable her to be comfortable and prosperous on a very small sum, and there is no doubt that such a lady is usually more acceptable to her patients and their friends.

Whether it be our fault or not, it is a fact that the majority of Indian princes who have founded and endowed hospitals in connection with the Dufferin Fund have expressly asked that an Indian trained lady may be appointed to them, rather than one sent from Great Britain.

There are a few points that need earnest attention from those who have the management of medical schools, the organisation of missionary enterprise, and those who wish to offer themselves for work in India.

First, medical women for India must be fully trained. All who have practical experience in this matter know well that the five years' curriculum prescribed by the General Medical Council is not one day too long. Medicine and surgery have made such great progress, and the preparatory subjects have undergone such great expansion, that only considerable ability and great industry can secure a qualification, let alone a University degree, at the end of the five years' course. We do not

[1] See Descriptive Chapter, p. 6.

find ourselves at all overwhelmed with theoretical and practical knowledge when all has been done which is required by the Council and the Examining Boards. If this is true of the newly qualified here in England, how much more essential is it for those who are to work in India. Here it is easy to obtain advice from seniors, to ask for a consultation, and to secure skilled assistants and trained nurses. There the newly fledged doctor is often many miles away from the nearest colleague; no consultation can be had, no assistance, skilled or unskilled, and, frequently in practice among natives, no nurse. Women doctors for India need to be more, not less, well trained than those who remain at home. A young man in charge of a male patient can take a friend to see him, and can consult with his senior if such there be within reach; but a native woman will very rarely consent to see a man, and therefore, no matter what the emergency and the difficulty, a woman physician must be ready to meet it.

Secondly, when possible, women doctors should work in couples. At present this is very rarely feasible, but as time goes on and the supply is more abundant it will be good policy to send out the newly qualified to work under the supervision of a senior. This would be naturally beneficial: the junior, fresh from college and hospital, knowing the theories and methods of the day, and the senior knowing the language, the manners, and constitution of the people, also the sorts of disease in India and the forms peculiar to the country. In time it may be hoped that one or more senior women of superior education and experience may be located in each chief town as consultants, while junior practitioners and women of less experience may be found in sufficient numbers in the smaller towns, and native

hospital assistants may be freely supplied to the country villages.

In this way an adequate female medical service could be gradually created, while the relief to the doctors themselves would be very great. It is, of course, the tendency of the young to think themselves perfect; but this is a harmless fallacy which does not survive the first few months of practice, especially isolated practice as in India. I speak from my heart; for when I went to Madras there was no woman doctor nearer than Bombay, while difficulties of distance, of finance, and the exigencies of our busy lives quite prevented us from meeting for consultation or for interchange of experience and ideas. Those who are intended for work in India should be most carefully selected with reference to age, constitution, and general fitness for such work. It is worse than useless to send out women over forty years of age, or those who are unsound in constitution or partly worn out from any cause. Indeed, it would be well for the authorities to insist on a holiday between the long and trying preparation and the equally trying work to which the candidate is to be sent.

Then, most difficult of all, how are we to judge of the moral fitness? and yet there is nothing more important. The native ladies are keen critics; they seem to know instinctively who are truly in sympathy with them, and naturally resent any failure in courtesy and in patience. Work among them is difficult; the difference in race, religion, character, and modes of thought can be bridged by nothing but living sympathy and ready tact.

Courteous we must be toward the lowly;
To the weak, and the sorrowful living too,
We must be courageous, refined, and holy,
By nature exalted and pure and true.

MARY SCHARLIEB.

No names having been received for discussion, Miss Ellaby, M.D., was asked to give her paper on

The Care of the Sight in Childhood and Youth

Miss Ellaby, M.D.

It is impossible to estimate too highly the value of the sight at any period of our lives; the efficient care of it, therefore, in early years is of the first importance.

It is at this time that the brain is most active in its receptive faculties, that impressions are received, and images stored up, which are never so easily acquired later; and if the sight is defective, the whole system of education is practically stopped. Even a blind child is in a measure better situated than a child with imperfect sight; for while, with the former, education may be systematic and continuous, with the latter it is often set aside in hopes of improvement, and even if these hopes are realised later, the child may still be placed at a disadvantage in comparison with others who have always seen well.

The acuteness of vision or the strength of the sight differs with different people, and also with habits of attention.

It is curious to note, however, that the sight has not materially altered in four thousand years. This is proved by the fact that the Arabs considered their standard of good sight to be attained when the small star Alcar (called by them Sárdakur, the Tester) could be seen.

This little star is just within the limits of ordinary healthy vision; it is in the tail of the Great Bear, and equal in brightness to a star of the fifth magnitude. The satellites of Jupiter are just beyond the range of sight, but Humboldt tells of a tailor in Berlin, called

Schön, who could distinguish them on clear nights. To him the stars appeared as bright luminous spots, and not, as to ordinary people, surrounded with streaks or tails of light.

It is probable that races living on plains or near the sea have the most piercing sight. Humboldt comments on the remarkable sight of the Peruvians, and Reich examined the sight of 140 men in a company of Georgian Infantry. He found that in 83 per cent. the sight was above the average, and that in no less than 32 per cent. vision was twice as good. There was not a single case of short sight. The limits of the field of vision were estimated as long ago as the second century, by Ptolemy. Observation shows that when the eye remains immovable, the field of vision may extend 140° from side to side and 120° from above downwards.

The impressions made on the eye last longer than on other senses. The ear can distinguish in a sound interruptions recurring 100 times in a second, but the eye retains an impression of light a whole second or even more.

Little reference to colour is made in the oldest literary documents. In Homer, as Mr. Gladstone points out, very few colours are mentioned, and the names of these are almost all misapplied. Geiger states that neither in the Vedas of the Hindus, nor in the Zendavestas of the Parsis, is there any indication of fully developed sense of colour—the sky and light are specially described, but there is no mention of blue; similarly in connection with vegetation there is no mention of green.

But in order fully to realise the necessity of precautions for the preservation of the sight, it is essential to

understand something of the construction and functions of the eye itself. We may remark here that the eye is an organ which has undergone evolution, as the result of the action of light upon the body, and with the absence of light the organ wastes and at length disappears. The mole, and some eyeless insects and spiders of Kentucky, are examples of this, and show how the process of degeneration advances by disuse.

The eye itself is nearly spherical, about an inch in diameter, and is placed in the hollow of the orbit. It is kept in position by muscles, blood-vessels, and by the optic nerve and other tissues. It is remarkably protected from injury, both by its bone surroundings and by the eyelids, which are extremely sensitive to any external irritation, and, by closing, preserve the eye from hurt.

But the special function of the eye lies in the power of seeing distinctly objects placed at different distances from the eye—though not with *simultaneous* distinctness. If a candle, a little way off, is looked at, and then, *without change in the eye*, is brought nearer, the flame becomes blurred, and can no longer be distinctly seen: it rapidly regains its clearness, however, by means of a slight and what is for the most part an *unconscious* change in the eye itself. It is this change, or this power of seeing distinctly objects situated at different distances, that is known as the power of accommodation.

The process of photography corresponds very closely to the process by which a picture is formed in the eye, and the eye may be considered as the camera obscura, contained in a round instead of in a square case.

In photography clear pictures of objects near at

hand can be obtained by moving the plate farther back; but in the eye, the retina, which corresponds to the plate, cannot do this. But there is another method in photography, and that is by increasing the strength of the lens in front, giving it two or three times its original power; and this the eye can also do, for it can increase the convexity of its own lens by means of a muscle, the ciliary muscle, which surrounds the lens, and which, by contracting, forces the lens to assume a thicker and more convex form. The eye is thus accommodated, or focussed for near objects. It is obvious that it is upon this focussing muscle that the burden is imposed in reading and writing—in near vision generally, that is—and it is in the undue strain of this muscle that lies one of the main sources of trouble and injury to the youthful eye.

This act of accommodation is usually associated with convergence, the function or power by means of which the eyes can change their direction in order to look at an object as it is brought nearer to them. Disturbance in the relation of these two important factors is often the cause of considerable discomfort in the sight. With very young children it is, as a rule, the general principles of hygiene which should be adopted, if the eyes are to be kept healthy. Moderate exposure to cold air in a healthy and well-nourished child is not injurious, but cold draughts, dust, and especially a bright concentrated light should be avoided.

Later on there are two special kinds of visual defects which it is of the greatest importance to recognise early and to treat properly, since, if neglected, they may give infinite trouble through the whole course of school life.

These defects are what are usually called 'long sight' and 'short sight,' or, in technical language, Hypermetropia and Myopia, and they are due in the main to a defect of form or change of shape in the eye itself.

In a normal eye, objects situated at and beyond a distance of five metres are seen distinctly without any effort on the part of the eye itself; in other words, pictures of distant objects are formed on the retina itself, the eye being completely at rest. In Hypermetropia and Myopia, however, this is not the case.

Let us first consider the condition of long sight, or Hypermetropia. The eye in this case is usually *flatter* or *shorter* than the normal or emmetropic eye. Consequently, when the eye is at rest, pictures of distant objects are formed, not *on* the retina, but *behind* it; and distinct vision, even at a distance, is not possible without a change in the eye itself, and this change consists in an effort of accommodation, produced, as we have seen, by the contraction of the ciliary muscle. The consequences of this are very important. In order to see distinctly at *any* distance the hypermetropic child has *always* to make an effort of accommodation, the eye is never at rest, and is always doing what a child with a normal eye only does when looking at a near object; and though the effort may be a slight one for objects at a distance, it may become very considerable for vision near at hand. So it often happens that a child who sees perfectly and easily at a distance, and who hitherto has had, to all appearance, perfectly good sight, may, when education commences, complain of headache and discomfort when using the eyes for near vision. After a time he may be unable to read with comfort even for a few minutes, will probably say that 'the letters run into one another,' and if these symptoms

are neglected, the eyes may get red and congested, and giddiness, constant headache, with or without vomiting, and even absolute inability to distinguish the letters in a book, may be the result.

In connection with Hypermetropia, a symptom often misunderstood is that the child may bring the book nearer and nearer to the eyes, thus giving rise to the appearance of short sight; but this can easily be explained. When reading is continued, the effort made by the child is so great that the ciliary muscle contracts more than is necessary—passes to a state of spasm, in fact; the child, in order to see distinctly, brings the book closer, and if the spasm increases, closer still, and so the affection intensifies itself.

Other symptoms to be looked for in connection with this kind of sight are: (1) a tendency to look sideways at a book, which may indicate that the converging power is defective or that one eye only is being used; (2) a nervous twitching of the eyelids, winking and blinking, sometimes accompanied by twitching of other muscles of the face; (3) a tendency to squint, a symptom that should never be disregarded. The real cause in most instances is that the child is hypermetropic, that the increase of accommodation is accompanied by an increase of convergence, and, if the latter is in excess, there is inward squint. This at first may be only occasional, when the eyes are tired or have been used for near vision for any length of time. Later it may become constant, in which case there is tendency to use one eye only; and the other, having no work to do, may become permanently injured by disuse.

The squint at the beginning is always most marked after fatigue or exhaustion, sometimes before meals, after a long walk; very often first after an illness, such

as measles or scarlet fever. The remedy in this, as in all cases of Hypermetropia accompanied by eye-strain, consists in the use of glasses, by means of which objects at a distance can be seen without an effort of accommodation; and if this is done early enough, all discomfort may be completely removed without further treatment.

The second visual defect which we have to consider is that of Myopia, or short sight. In this condition the eye instead of being *shorter* is, as a rule, *longer* than the normal eye. Pictures of distant objects are therefore formed not *on* or *behind* the retina, but *in front* of it. No effort of the eye itself can remedy this; the only means then of procuring distinct distant vision is by use of a concave glass, to diminish the strength of the lens in the eye. This condition of short sight may be easily realised by looking through an ordinary hand magnifying glass. In England Myopia is comparatively rare—less than 5 per cent. of the population—and for the most part slight in degree. This immunity may be attributed partly to our natural surroundings, partly also to the habits of our ancestors, who led as a rule healthy and open-air lives. But though certainly hereditary, Myopia can also be acquired, and it is this form, called progressive myopia, which is the most to be feared.

The principal cause is prolcnged use of the eyes in near vision under more or less bad hygienic conditions, such as bad ventilation, inadequate light, a bad form of type, and insufficient exercise and food. The remedy consists in the removal of these causes, in the use of glasses in some cases, and in the very careful regulation of hygienic conditions.

It is undoubted that education has a marked influence on the production of Myopia. We need only

refer, as a proof of this, to the German race, with whom at one time it attained to very large proportions. In Germany the number of illiterates is very low—only 1 per cent. of the entire population—the standard of education very high. On the other hand, school hygiene until latterly was bad: the buildings were badly constructed; the lighting especially insufficient, sometimes eight or ten boys working by the light of a single candle; the hours of work very long; and, in addition to this, the Gothic character, then invariably used, was small and far less distinct than the so-called Latin one.

Professor Cohn, of Breslau, who examined 10,060 school children, found that the percentage of myopia increased with the grade of the school, being 1 per cent in the rural schools, and attaining to 40 and even 50 per cent. in the higher classes of the gymnasia. A considerable diminution almost immediately followed the construction of better schools.

At Coburg, after three years, Florschutz found a decrease of Myopia from 21 to 15 per cent.; and Hippel in the new school at Giessen found 34 per cent., as against 40·5 per cent. found by Cohn in the old schools.

In England the results of similar examinations, as might be expected, differ considerably. In this country the amount of Hypermetropia preponderates largely, and the symptoms of eye-strain are much more exclusively attached to this condition than to that of Myopia. Mr. Brudenell Carter, in his official report on the vision of children in London Elementary Schools (1896), says that amongst 1,448 children presented to him as having subnormal vision, he fails to find evidence of any extended prevalence of short sight. Out of 1,146 cases the myopes number 134, and of these 51 only, or 4·6 per

cent., had myopia above the degree (2·5ᴰ) which forms the limit of eligibility for the Indian Service. Seven hundred and fifty children, 65 per cent., were hypermetropic; and, after eliminating doubtful cases, he found emmetropic vision in 7·1 per cent., or in 63 out of 886 cases.

The results of my own examination of the sight of 310 pupils (ages eight to eighteen), belonging to six schools in or near London, of the Girls' Public Day School Company are as follows:

23·2 per cent. of *Emmetropia*	Vision quite normal		72
66·4 per cent. of *Hypermetropia*	No eye-strain	137	
	Probable eye-strain	69	206
10·3 per cent. of *Myopia*	No eye-strain	20	
	Probable eye-strain	12	32
			310

It will be seen that these results differ somewhat from those already given, but not more than might be expected, from the following causes:

1. The different class to which the children belong;
2. The more or less good hygienic conditions in which they are placed both at home and at school;
3. And, perhaps chiefly, from the fact that the examination was general, and not only of children in whom some defect of sight had been previously noticed.

It will be seen that of all these children, 229, more than two-thirds, were found to be working quite comfortably. The remainder all showed some indication that watching and attention were needed as regards the eyes, and a small proportion were found to have sight distinctly defective, and were reported as requiring immediate treatment. Eighteen months later a certain number of the same children were re-examined, with the (so far) satisfactory results, (1) that no child well reported of in the previous examination had developed

symptoms of eye-strain; (2) that the relative number of children previously reported as working *with* eye-strain had diminished in the proportion of 1 to ·6, or a decrease of rather more than two-fifths.

There is no doubt that the systematic examination of the sight in schools would be of the greatest benefit, not only to the children themselves, but also to the school to which they belong, as one means of ascertaining how far the work is adapted to the gradual development of their physical and mental powers.

But we must now pass on to other points; and first the question of light, as regards quantity, quality and direction, must be considered.

It is a well-known fact that the dimmer the light the nearer the book is brought to the eyes. Consequently the greater the strain on both accommodation and convergence. Its careful regulation, then, is of the utmost importance. All artificial light is inferior to the diffused sunlight; near work, then, at night, especially for children, should be avoided as far as practicable.

As regards day lighting there are several points to be considered:

1. *The position of the windows with regard to the cardinal points.*—An east or south-west aspect procures on the whole the most light, and it is easy to protect from direct sunlight. A west aspect has this disadvantage, that the afternoon hours of work are too short to allow of full benefit being derived.

2. *The number and size of the windows.*—The right proportion allowed should be (Cohn) 36 square inches of glass to every square foot of floor—that is, 1 square foot of glass to about 5 square feet of floor. This is amply sufficient, unless there are high buildings which

intercept the light outside. How deficient this was until latterly may be shown by the fact that in the Paris Exhibition, 1867, the proportion in the Prussian model schoolroom was 16 to 17 square inches of glass to 1 square foot of floor (little over half the sufficient quantity). The American model schoolroom, however, had 32·2 square inches to 1 square foot.

At the Vienna Exhibition, in 1873, there were various grades, from the Portuguese (the lowest), 17·6 square inches, to the Washington model, in which there were 52 square inches of glass to 1 square foot of floor in 1878, in the Ferrand School-house there were 60 square metres of glass to 55 of floor. Cohn considered this schoolroom to be the best lighted one in existence.

One other point of importance is that the piers between the windows should be bevelled on the inside, to allow of diffusion of the light. The base, however, should be rectangular, since the light falling on the floor below the desk may cause an unpleasant reflection. The windows should be at least 40 inches above the floor.

Perverse lighting may also be the cause of mischief. This comes from obliquely incident light, chiefly from below, and is not possible from above.

3. *The position of the windows with respect to writers.*—If the light comes from the right, the shadow of the hand falls on the paper; if in front, there is not this inconvenience, but although the children in the front rows have sufficient light, those behind have not. If there is a window on the left in addition, then there is dazzling and reflection in a considerable degree. Windows behind are not injurious if light comes from the left as well. The right-handed light is certainly the most injurious, and the left-handed the best. Bi-

lateral lighting was, however, recommended by Galezowski in the Société d'Hygiène Publique in Paris, 1879. He advised the addition of a small window high up on the right-hand side. Cross-lighting, which so interferes with relief impressions, was not produced, as the window being high up merely adds to the general lighting of the room. From an oculist's point of view, an ideal schoolroom would be one with a glass roof, as is sometimes found in America.

4. *Surroundings of the school house.*—It is very important that there should be no blocking. Javal justly demands that the distance of opposite buildings should be equal to twice their height.

Blinds are useful for veiling the direct sunlight; they should be made to draw from below upwards, as light at the top is the best. The colour of walls the most to be recommended is grey. As regards artificial lighting, it must be remembered that all such light is inferior as regards its colour, its feebleness, and its heat. This is easy to understand when we consider that the light of the sun is 60,000 times greater than that given by a wax candle placed a yard off. In addition, there is often the disadvantage of having multiple sources which cause disturbance to relief perception, and there is the vitiation of the air by the consumption of oxygen. Electric light has the advantage in many ways—one source is possible, there is no heat, and the air is not affected.

The intensity of the light is difficult to determine. The simplest and most practical method is in the use of test-types (recommended by Hoffmann) which can be hung in different parts of the room, and the vision tested by means of them. The minimum quantity should not be below three-fifths of normal. Cohn

however, recommends rather a different test. He found that the minimum brightness on a dull day is equivalent to the light given by ten candles, and he considers a fifty-candle power the best substitute for daylight. He found that all class-rooms in which small types (JT) could not be read at 12 inches (30 cm.) had on dark days less light than ten candles. He therefore fixed ten candles as the minimum of brightness; and he says, to quote his own words: 'We are asking nothing unreasonable when we fix as the minimum of hygienic requirements the *fifth part* of the amount of light by which we can read as quickly and as far off as by day.'

After general lighting we should consider *the contrast* between the object looked at and the ground or foundation on which it is seen. The greater the contrast the easier the sight; and as the greatest contrast possible is between black and white, the use of very black ink and very white paper is to be recommended. Work becomes very tiring if pale ink and grey paper are constantly used. It is from this want of contrast that the use of slates for little children is to be deplored. The contrast between the bright grey of the pencil and the dark grey of the slate is too slight to be otherwise than trying. Cohn drew special attention to this in his examination of schools, and he pointed out the fact that a child reading ink letters at 12 inches from the eye, could only read the same size letters on a slate at a distance of 9 inches, a serious difference in prolonged use.

The types should be distinct.—Letters of simple form, like the so-called Latin, are preferable to Gothic, and the careful execution of figures is specially needful. The English and American types are, on the whole, best.

The size of the objects should not be too minute. Letters should not be less than 1·5 mm. high, 2·4 mm. wide. The interval should be sufficient, and the shorter the text lines the better.

We have finally to consider the important question of desks and seats. Fahrner says 'we let our children grow crooked in order that their handwriting may be nicely slanted,' and he goes on to describe the process. 'Before writing, the child is upright, and the shoulder blades are thrown equally back; but as soon as writing begins the children move their hands slightly forward and to the left. Soon after the hand drops down with a rapid jerk. From this point there are two groups. Those writing on the *upper* part of the slate bend forward, place both elbows on the table, and the simple round back is thus developed. Those writing on the *lower* part of the slate allow their right elbow to overhang—the left is still on the desk, and so the "skewed back" is produced.'

There are four points of importance to be considered in the construction of the desk and form.

1. The difference—that is, the vertical distance—between the desk and the form. The higher the desk, the nearer the surface is to the eyes; consequently the greater the difference the more will be the strain on the accommodation and convergence. The distance between the elbow (the arm hanging down) and the seat bones is almost one-eighth of the height; but as the elbow in writing is moved slightly upward as well as forward, to obtain the proper difference 1·6 or 2·4 inches (4 to 6 cm.) should be added to one-eighth of the height.

2. *The horizontal distance* between desk and form. Herein lies the kernel of school-desk reform. The

greater the distance the more the body will fall forwards. The distance should be nil or negative. Cohn and Buchner consider that there should be a *minus* distance of two inches—i.e. that the edge of the desk should overlap the form two inches vertically.

3. *The height of the form* should be equal to the length from the knee to the sole, since if the legs dangle the child soon gets tired. This length is about two-sevenths of the height of the child, the knee being bent at right angles.

4. *The slope of the desk.*—A slope of 45° is good for reading, but too great for writing; 1 in 6 is the best for the latter, and a reading slope at the end of the desk is very good.

In addition to these four cardinal points (Cohn) there are still to be considered:

(a) *The back rest.*—The cross back-rest is better than the upright.

(b) *The width of the form.*—At least 12 inches.

(c) *Place width.*—Not less than 25 inches.

(d) *The desk width.*—At least 16 inches.

The main point is that the eyes must not come too close to the work, in order that there may not be undue strain on the accommodation.

That the importance of all questions connected with the hygiene of the sight cannot be too highly estimated, we have almost daily proof. It is certain that serious attention to this subject in all its branches must bring its own reward to all promoters of education.

At the conclusion of this paper a vote of thanks to the Chairman (Mrs. Fawcett) was moved by General Moberly, seconded by Sir Douglas Galton, and passed with acclamation.

Agricultural Education for Women in Great Britain, Ireland, and the Colonies

The Right Hon. Horace Plunkett, M.P., who had kindly consented to take the chair, gave the following valuable address on this important question.

Right Hon. Horace Plunkett, M.P.

I suppose I may assume a general agreement that in the term 'Agricultural Education for Women' we include any education which may fit women to take a useful part in rural economy or to improve the conditions of rural life. For surely one of the greatest problems of the day is the tendency of the rural population to abandon the unequal struggle against agricultural depression—which, be it remembered, is not a British and Irish but a world-wide factor—and to seek consolation amidst the distractions, excitements, and wider opportunities of advancement afforded by the more progressive civilisation of the towns. I say, therefore, that agricultural education, whether for men or women, must not only seek to increase the resources of the agricultural industry proper, and to supplement them by the development or creation of subsidiary industries suitable to a rural population, but must also aim at a social and intellectual elevation, by adding to the healthier physical conditions of rural life some at any rate of those attractions which the superior organisation of the towns can bring within the reach of their inhabitants. This morning we have only to consider woman's part in the solution of this problem; and while it would be idle to divide between the sexes the burden and responsibility of this dual task, it is safe to say that, without the concerted action on the part of the wives and daughters of

those who still are fighting the battle of rural life, the problem can never be successfully approached, either in its economic or in its social side.

I may be expected to illustrate the position I take up by a reference to my own country, where questions affecting the economic and social conditions of rural life are of such paramount importance. Our rural population began to crowd large cities over half a century ago, and this melancholy exodus has continued ever since—not, however, the large cities in Ireland, but cities three thousand miles away. We wish to stop this draining away of all that is strong and enterprising in our people. There is only one way to do this, and that is to make life at home, which is almost exclusively pastural and agricultural, more profitable and more enjoyable. So our problem is the same as yours. I am glad to say the best minds in Ireland are now concentrated upon an attempt to solve it. Many of our ablest public men are working together in a committee formed two years ago for this object. I dare say the report of the Recess Committee is known to a good many of those whom I am addressing. To those who have not seen or heard of it, I may briefly say that this body of Irishmen, drawn from all political sections and religious creeds, set itself to inquire into the condition of European countries, from whose economic conditions and progress during recent years some lessons might be learned as to how things could be made better in Ireland. They arrived at certain distinct conclusions which cannot now be stated in detail. There were, however, three guiding principles which seemed to the committee to dominate the policy of every country that had succeeded in elevating the social and economic condition of its people, where Ireland has so far failed.

It is unnecessary to say that a superior system of education was everywhere the chief agency of economic and social advancement. But this great agency of progress was ever accompanied by two other equally necessary auxiliaries—namely, the principles of organisation and representation. To the principle of representation in connection with women, I shall, for reasons of prudence, give a wide berth. It need not be discussed to-day. But the principle of organisation appears to me to be quite as essential as education, and indeed often a necessary preparation to it. Therefore, for the last eight years we have been attempting to organise those engaged in the agricultural industry in Ireland on a co-operative basis. The Irish Agricultural Organisation Society, the body which is promoting this movement, fully recognises that there is a female side to its work; that, *pari passu* with the improvement in the methods and habits of the farmer and farm labourer, it is essential that means should be taken to educate the farmers' wives and daughters not only in dairying, poultry farming, gardening, and the lighter farmwork, but in the domestic arts of cooking and sewing and the various cottage industries, especially those which may be classed as artistic handicrafts. And in agricultural pursuits this education needs to be supplemented by organisation, just as much in the case of woman's work as in that of man's work. The necessity for adopting this course was brought home to the Organisation Society in a very significant way. One of the most important improvements in which we have been engaged was the formation of co-operative societies of farmers, for the purpose of enabling them to erect creameries, and to equip them with all the modern appliances for the manufacture of butter. These appliances were very

costly and quite out of reach of individual farmers. Moreover, under modern conditions, it is necessary that butter should, in dairying districts, be manufactured and marketed in large quantities of uniform quality. This of course implied a domestic revolution, in which our adversaries loudly complained that we had robbed womankind of an industry which from time immemorial had been exclusively hers, that we were ruining the farmer by the substitution of the piano for the churn. When we replied that there was still much for women to do upon the farm, we were told that we had taken away the only suitable employment for the sex in the dairying districts, and that no resource was left but emigration or labour in the fields. Now very different ideas prevail as to what are the proper functions of women in rural communities. In another part of Ireland—which to those who have learnt not to regard that country as a homogeneous whole, I may describe as being a few centuries behind the part to which I have been referring—the parish priest once pointed out to me a couple he was about to unite on the following day. He brought me to the bridegroom, and of course I had to congratulate him on his good fortune. Now the lady's features could not be said to adorn any of our Irish types of beauty; but her physical proportions could properly be described as fine, and so I could quite honestly congratulate him on the lady's figure. I shall never forget my hero's reply. 'Yes, sir,' he said; 'she will be as good as an ass to me.' This represents another extreme view of woman's function in agriculture. Now we hold that there is simply an unlimited sphere of useful, profitable, interesting, elevating, and agreeable employment for the peculiar faculties of the sex in rural life. When the Recess Committee appealed—and un-

fortunately appealed in vain, although they had the Irish Government on their side—for some of those educational advantages which were at the root of the progress of rural communities abroad, they attached special importance to the work of what are known as practical schools on the Continent, and notably in France. I know that some are here to-day who have a personal acquaintance with these schools, and I hope they will say something about them. But all we can report from Ireland, so far, is that, pending recognition by the Government of what I conceive to be their plain duty towards that country, we are endeavouring to organise co-operative societies of women workers for needlework, crochet, embroidery, and other suitable industries. Much self-education can be attained in this way by the community. Many English women of well-known philanthropic proclivities—notably Lady Aberdeen, the founder of the Irish Industries' Association; Lady Cadogan, who is organising a Textile Exhibition[1] on lines of her own; Lady Betty Balfour, who in her quiet way is encouraging our new industrial projects—are actively engaged in promoting these organisations. I sincerely hope that we shall soon be able to show such evidences of organised local effort in Ireland, that no Government will be able to resist our most reasonable demands for these educational facilities afforded by the State in every country which competes with us in agriculture and industries.

I have already taken too much of your time, and will not dilate on the social advantages to the rural community of the practical education of women. These advantages are consequential and obvious, and will, I hope, be brought out in discussion. I have only to

[1] Held in Dublin August 1897.

express a wish that the result of to-day's debate will be to establish, at any rate, this main proposition; that, both in its economic and in its social aspect, the problem of ameliorating the conditions of rural life must largely be solved by women, and that organisation and education are the lines along which the solution is to be sought. Lady Warwick is heartily to be congratulated on having brought together men and women whose deliberations cannot fail to throw some light upon one of the most neglected questions of Imperial progress—the welfare of those who live by the land.

The Chairman then called upon Lady Georgina Vernon to read her paper on

The Training of Women in Dairy Work and other Outdoor Industries

Lady Georgina Vernon

The problem of how to obtain the most profitable and suitable employment for women of the upper classes is one which is daily pressing for an answer.

An absolutely new class demanding work and remuneration has sprung into existence of late years. Offices for the employment of women are thronged with applicants young and old, culled from what not long since was known as the leisured class, but whose diminished, or in many cases lost, incomes have thrust them out into the large company of toiling women. A few years since, when a girl undertook some definite work away from home, it was generally surmised either that she was unhappy at home, or for some reason was weary of social life, and sought interest and pleasure in the activity of some philanthropic scheme. But now, as we all know too well,

the sad need to 'make a living' is limited to no class or age: and yet, though I have said the word 'sad,' it is through the ennobling influence of work that many a woman has cast off the trammels of her old fashionable life and risen to higher womanhood, proving herself capable of conquering difficulties, and through hard work and self-denial made a home for those near and dear to her.

It is greatly for the sake of such as these—whose early days have been passed in the sweet luxury of country homes, with out-of-door exercise, with their horses and their dogs, with their gardens, and healthy sports in the fresh air—that I desire now to speak. I wish to show that there is a sphere of what would prove most congenial work to many, but which has been so far greatly overlooked and neglected. I believe, in a great measure, this is because women have not been shown what interesting and absorbing work can be found in activities connected with agriculture. I will preface what I have to say by the remark that all that I describe in the following suggestions is work suitable for an average strong and healthy woman.

Dairy work first claims our attention, and here we can find not only work which pays well, but work with a special charm, and in which the quick instinct and neat, deft fingers of the cultured woman will find a field for exercise.

The first necessity for success in whatever branch of dairy work is eventually taken up, is that the learner should be thoroughly grounded in the very first details, and in those things which might appear to many ladies quite unnecessary for them to learn. I mean the keeping floors clean and sweet, the art of thoroughly cleaning the dairy utensils, keeping every pan bright and shining.

Spotless cleanliness is one of the principal secrets of all dairy success. The work of a dairy is marvellously lightened in these days by the aid of machinery and the various appliances now in common use. For instance, the separator, which minimises the labour to such an extent that a dairymaid, instead of spending half a day in scalding and washing and keeping the pans clean for the milk, can now finish the work connected with even a large dairy—I mean from fifteen to twenty cows —in a couple of hours.

Then there is the butter washer, which obviates the handling of the butter, and instead of the old laborious process of washing and turning and squeezing the butter-milk from the butter, by a few quick turns it rapidly cleanses the golden mass of sweet fresh butter from the butter-milk and makes it ready for rolling into marketable shapes. Then there is also the charming little 'Victoria' churns without beaters, which are so easily scalded out and kept sweet. Indeed, like most work, this has been greatly simplified, but none the less does it require attention and cleanliness. There is a good deal in the care of the milk and the cream, which should be thoroughly mastered. For instance, a knowledge of the proper time to keep cream, and the amount of acidity or ripening required for first-class butter-making —this and a great deal else must be learned, as it is want of attention to these matters which has given our English butter a less good name in the market than the Danish or Normandy butter. But I can assure those who will take the trouble and spare no pains to ensure perfection, that English butter, when really good, will always command a higher price in the market than the foreign produce.

The whole labour of butter-making is clean and

dainty; eminently women's work, and can be made a very profitable industry. I should, however, strongly urge all those who are thinking of embarking in dairy work, that they also learn to make cheese. I am not an advocate for women making the large English cheeses, such as Cheshire or Gloucester, because for these a man would be required to lift the heavy vats of milk during the process, as well as each day during the turning and ripening of the cheeses; but I should urge women to take up, more thoroughly and definitely than has ever been done yet in our English dairies, the making of what are known as soft cheeses, the 'Fromage Molle' of France, which is daily becoming more popular in England, and for which I foresee a great future if we could bring these little easily made cheeses quickly into the market at reasonable prices. I know that efforts have already been made in this direction, but more in an amateur way. Here and there a few Camembert or cream cheeses are made, but the work of production is not carried on seriously or on a large scale. At one time I hoped to see Camembert brought to perfection in England, but for some unknown reason, whether it is the climate, or the pasture of the cows, or whatever it is, no one has been able to do this. Camemberts have been made and *are* made, but they just miss that captivating flavour which one finds in these little cheeses from Normandy. Still, if I were starting a factory for soft cheeses, I should not despair, but I should go straight to the *home* of the cheese, which is not far from picturesque Lisieux, in Normandy, and I should learn the whole system there. Doubtless the great stumbling block is the varying temperature of our English climate, and the consequent exceeding difficulty of giving these capricious little cheeses not

only the warmth (which may be achieved by stoves or pipes) but the right quality of pure fresh air which they demand. I would, however, still urge another serious attempt to make these cheeses. Then, I may mention that there are quite a number of easily made and easily ripened soft cheeses, and as I desire especially to call attention to this industry, I must dwell rather more fully upon it.

The simplest of all, the old-fashioned English napkin cheese or cream cheese, needs no comment, it is no trouble to make, and sells for nearly double what the cream composing it is worth. Gervais is another highly popular cheese—much used, I believe, in clubs—very easily made, and fit for the market in three days. Bondon takes longer, but it may be made from skimmed milk, and thus can be used to work up the milk from which the cream for the richer cheeses has been taken. Livarot is a cheese which is also made of skimmed milk, but it is so strong in flavour that I do not think it will ever become a great favourite here; still, it has the advantage of using up the skimmed milk. Pont l'Evêque is a charming cheese, rather larger than those named before, and in France is very often sold green or unripe, and ripened by the purchasers in their own cellars; this is a great advantage to those who have not large and suitable cellars for the ripening. The same advantage belongs to the various cheeses known as Brie, which are firm enough for the market at the end of a fortnight. I can confidently name the varieties of the Brie and Coulommiers cheeses as easy to make and very profitable to sell.

The plant required for the making of all the six soft cheeses which I have named is of the very simplest kind. There are none which could not be made in an ordinary

dairy, and I do not hesitate to say would repay the maker 50 per cent. for the worth of the milk or cream employed. If the difficulties of a journey to Normandy, where soft-cheese-making could be learnt, are too great, I can speak with pleasure of the excellent teaching given in this branch of dairying at the British Dairy School, at Reading,[1] where it has been made a special subject.

I wish what I say on this subject to be so purely practical, that I have refrained from dwelling on the fascinations of cheese-making; but I can affirm with truth that to those who embark on the work it soon becomes a passion, and I have often watched the creator of one of these interesting products stand breathless with anxiety as the first plunge of the taster is made into the tender sides of the little cheeses, and the verdict awaited with the keenest emotion.

I have advised a course of study for these soft foreign cheeses, but there are one or two kinds of English cheese—notably Wensleydale and Edish—which are small, easily handled, easy to make, and very saleable; and if it is wished to learn how to make these or the *common* sound English cheese—such, for instance, as are known as Derbyshire cheeses—I should strongly advise a residence for three months or so, during the summer, in a farmhouse where this work is carried on. Indeed, whatever special branch is adopted afterwards, I think there is no better grounding than is to be found in some of our well-managed large English dairy farms. The pupils would live with the family, work with the daughters of the house, and—let me say—would find in many of our English farms most refined and kindly companions. The life is healthy, full of interest, and the expense would be slight. I

[1] *Facts for Women.*

may safely say that for three months a pupil could be received and trained and taught for 6*l.* for her board and lodging, and 5*l.* premium for the teaching; and many a pale delicate girl would find herself at the end of the time a rosy-cheeked and healthy being.[1]

When once dairy work has been thoroughly mastered, there are many doors of lucrative employment open. Teachers are now required and highly paid by County Councils in connection with the schemes for technical education. Then, with a little enterprise and energy, anyone who had been initiated into the mysteries of French cheeses could make a very good living by giving lessons at farms on this subject; or, again, dairymaids are in continual demand, and are highly paid. A short time since, I knew of an offer being made to a girl who was thoroughly qualified in all branches of dairy work, to take the management of a large dairy with servants under her: her salary was 100*l.* a year and a house. I know there are not many such places as that, but it is a very common thing on large estates for the dairymaid to have a house or rooms, and a salary varying from 30*l.* to 50*l.*

I think that if one or two girls joined together in a small dairy farm, they could with energy and care make a good and pleasant livelihood; but in this case, of course, a small capital would be required to start it. I should not advise embarking in a large business which would entail a number of men for the care of the cows, but on what in the Midlands is known as a 'little place,' that is, a small house and land for two or three cows. There are few external expenses, and these small places pay in proportion infinitely better than the large farms. I should like to add that a very profitable industry

[1] *Facts for Women.*

can, with little trouble and a minimum of expense, be combined with other work—that is, an apiary. We read of tons of honey being brought over yearly from Switzerland, while in many districts in England you hardly find a beehive. There are few more purely lucrative employments than bee-keeping, for when once the hives are provided the cost is almost nil. Bees will often be given by some kind neighbour who entertains the happy superstition that it would direly affront her bees if she were to sell any, and thus your bar-framed hives can be stocked free of expense. A really good hive and all appliances necessary can be bought for 2*l.* The work connected with the care of the bees is very light, and no one need be afraid of stings, as the only time when bees are apt to sting is when their honey is being taken, and this is so easily accomplished with the little sections which are slipped on and off the tops of the modern bar frames, that a pair of thick woollen gloves and a veil are quite sufficient protection. The work that most amateurs dread is hiving the bees when they swarm, and certainly the large dark mass of little insects hanging from some branch or hedge are formidable in appearance, and sometimes heavy to lift; but at such a time the bees rarely, if ever, interfere with the person who hives them. Many of the women near my home turn up their sleeves to be free in their movements, and, bare-headed and bare-armed, work amongst the thronging insects without the slightest fear.

With respect to profit, one may calculate, in a tolerably good year, on a large hive yielding from 40 lbs. to 50 lbs. of honey, and this, if sold in the comb, will generally fetch a shilling a pound, or if extracted the run honey will command a ready market at about 9*d.*, or if

sold wholesale in large quantities, about 7*d.* Therefore one year's return will more than pay for any initial expense. I have spoken of the apiary in connection with dairy work because it can be so easily and profitably kept upon a small farm.

Next in importance to dairy work as a most fascinating and paying industry, I shall place gardening. This is a branch of work which could so easily be carried on by ladies in their own homes and their own gardens. I think it is terrible when one sees how many splendid gardens are left almost to go to waste, because the number of gardeners formerly employed has had to be reduced, so much, that now one or two have to do the work of six or eight men; but in this case we have ground already cultivated, and probably hothouses, or at least green-houses, capable of producing good crops. This is so evidently a source of income lying absolutely unused that it appears to me one of the most obvious ways in which ladies with reduced incomes can employ themselves; but I should like strongly to emphasise the fact that, if it is to pay, it must not be carried on in the fashion of too many amateurs, and be looked after one day and neglected the next. A garden, to be profitable, demands knowledge of horticulture and constant care and attention, and I should advise a course of instruction at the Horticultural College at Swanley in Kent, if this occupation is to be taken up seriously. The fees are 70*l.* a year, and two years of instruction are required before a diploma is granted.[1]

This appears at first sight a large outlay, but this diploma would fit a student either to cultivate her own home garden with profit, or to take a situation as head-

[1] *Facts for Women.*

gardener. I hear that there are now many women working in this capacity and receiving good salaries, and that there are openings for many more, as many ladies, with large estates and gardens to manage, prefer to have a lady to deal with, and one who can help her in various matters, such as the arranging of flowers and table decorations, which are a heavy tie to any person with much business on hand, and which can be more tastefully and better carried out by an educated lady than by the average gardener.

There are many parts of Ireland so singularly well suited for carrying on gardening and the production of fruit and vegetables on a large scale, that it is sad to know how little is achieved in this direction. Doubtless one difficulty has been to obtain a good and regular market; but from what I have heard of this, I think the English market must be looked to, and with the reduced charges for freight of agricultural produce, the cost of carriage need be no bar to this scheme. But a vigorous effort should be made to extend the same cheap rate of freight from the interior of Ireland, which I believe has not yet been done.

A ready sale can always be obtained very easily in our large towns for fruit and vegetables. Careful packing is required, and this must be *learnt*, and is an art that could soon be acquired by a few lessons from a market gardener, or if the Swanley course is taken, it is made there a regular branch of instruction.

I have not dwelt upon the details of this work, as so much depends on whether a lady takes it up as a paid gardener or undertakes it upon her own account; if the latter, and unless she has a large garden at her command, then I am strongly of opinion that she will find the growing of flowers and plants for

sale more profitable than vegetables. Our markets are now so full of imported vegetables from France and the Channel Islands, that the remuneration is very small; but by a system of advertising and the aid of parcel post, plants, cuttings, early flowers, even those of the commonest kinds, obtain a ready sale, and I know that many ladies add to their incomes in this way. But there is in gardening the possibility of a good return for the labour, and there is no pursuit more absorbing in the daily interest, from the promise to its fulfilment, than is brought by the sowing and the gathering of a garden.

One more industry must be mentioned on my list, or it would be sadly incomplete, and that is poultry keeping. I have placed it last because in our English climate there are so many risks of failure, and also, if poultry rearing is carried on upon a large scale, it rarely succeeds for more than one or two years in the same place, on account of the ground becoming tainted. For this reason, if poultry keeping is taken up, I should advise that the object aimed at should be the production of eggs, and not the rearing of chickens.

Upon two acres of grass land, with a few good cheap wooden structures, 100 fowls could be profitably kept; and if the plan were adopted of dividing the run and changing the fowls monthly from one side to the other, with a yearly dressing of a little lime, there would be no fear of disease amongst the poultry.

The first outlay in buying the stock of good laying hens should not be more than 10*l.*, and the erection of the houses required, another 5*l.* The cost of keeping poultry is supposed to be a penny per head each week, and the hundred fowls should on an average in the

summer months give twenty-four dozen eggs a week, at prices ranging from 1*s.* 2*d.* to 1*s.* 6*d.* a dozen—here I am speaking of the London market. In the winter rather more food is required, and we should put the cost of 100 fowls at 10*s.* per week; but the eggs, now perhaps only ten dozen a week, would be worth from 1*s.* 6*d.* to 2*s.* a dozen, and still leave an ample profit. I think, if poultry keepers would devote their energies more to this question of supplying the markets with eggs than to rearing of chickens, they would find it a more certain profit. There is such an unfailing demand for eggs. Here again comes the necessity of careful packing and regular supply, but this is no real difficulty, and only requires care and attention.

I fear that I may be charged with being an optimist in my view of the various out-of-door industries open to women, but I have only stated facts, each one of which can be verified. I am sure that it merely needs that many of the women now living at home unoccupied, and therefore unhappy, should see that there is a sphere of work open to them, calling for merely average capacity (although certainly demanding businesslike habits and energy), which offers interest and a good livelihood, and we should have many more embarking in these various branches of work allied, if remotely, to agriculture. Above all, I should like to urge upon our Irish sisters the voiceless petition of their richly endowed and beautiful country, that her resources should be called forth. Look at the rich garden-land uncultivated, see mile upon mile of sweet pastures, which could support double and treble the number of cows, tread the hundreds of miles of sweet heather-clad hills and moors, and ask where are the bees to gather the honey distilling from the fragrant flowers? Surely

Nature calls us not to leave her treasures wasting and uncared for, and richly will she reward those who in the peaceful scenes of country life find active employment and interest, and last, though not least, the blessing of health, which is rarely denied to the worker in fresh air and out-of-door industries.

I can only add that I shall be most happy to talk over any of the matters I have touched upon with anyone desirous of further information on these subjects.

GEORGINA VERNON.

Mr. H. Macan gave the following speech on

Education Suitable for Women in Rural Districts.

Mr. H. Macan

The subject which I propose to deal with covers very much the same ground as that which has been so admirably dealt with by Lady Georgina Vernon. It is with regard to those occupations and that education which are suitable for women who are destined to spend their lives in agricultural districts, either in England or in the Colonies. I do not approach the subject quite from the same point of view, however, as Lady Georgina Vernon, because I do not approach it from the point of view of the women who are unemployed. I rather approach it from the point of view of the general mass of women who have their ordinary home duties to perform, and therefore seek, or ought to seek, certain useful occupations in the rural districts which will help to supplement the work of their home. If they seek this occupation, they naturally should have some preliminary education to prepare them for it. I noticed that one of our Colonial Premiers—Mr. Reid—in some remarks he made the other day, gave us some very useful advice concerning the educa-

tion of the women who were to be sent out to the colonies. He said, 'I might add a word to the husbands of this country. It would not be amiss if you taught the daughters of England to do a little mending and a little cookery." That is more or less the text from which I desire to speak to you to-day. The subject, I am well aware, is one of very great difficulty, and the principal difficulty is this, as was admirably said by Professor Armstrong at the late Technical Congress—that the education given to our women is too little of a practical character. The education of women in this country has followed, and has followed at a long distance, the education given to boys; that is to say, where the movement in favour of a practical education for boys is at the present day, at the same rate of progress, a similar movement in favour of the practical education of women will be some twenty years hence. I wish most strongly to deprecate the idea which is so prevalent, even amongst the most enlightened advocates of the higher education of women at the present day, that to give a woman as good an education as a man, or to give a girl as good an education as a boy (which we all agree is necessary), is the same thing as giving them the *same kind* of education. Because boys have been educated in the past, and to a certain extent are educated in the present, upon lines laid out by old traditions, there is no reason why the new schools for girls, which are growing up and being created daily, should follow those old traditions instead of the advances which have been made by the progress of modern science. There is too great a tendency in all our schools to consider that every girl should have not only the same education as every boy, but should have the same education as the

cleverest boys, or the boys of the most wealthy parents. The High Schools, I am glad to say, at the present day are teaching practical subjects, giving a superior education, and giving it in a practical manner. But it is the general lack of good practical education which is the chief difficulty in approaching this subject; there are also certain special difficulties which meet us from the agricultural point of view—the point of view of the rural districts. Women are not trained to be agriculturists, and cannot be trained in agricultural colleges in the same way as men. They do not take to agricultural life, or life in agricultural districts, because they have been brought up to it; they take to it generally as a matter of accident or on account of the accident of their marriage. The late Royal Commission, in its definition of 'secondary education,' was very strong on the point of its tending in the direction of fitting people for the life which is to be lived. With women you have a primary difficulty, that in their school years you cannot tell what is the life which they are to live. Unfortunately in this country, and to a very large extent in our colonies, at the present time all higher agricultural instruction is given at boarding establishments. Now let me emphasise that point, because I do not think it has been sufficiently dwelt upon. We are generally agreed that, for the workman or the mechanic, the best way in which technical education can be given to him is that, while he is working in the day-time in the workshop where he can learn the practice of his trade, he should have certain hours off, or spend his evening in learning those principles of the trade which bear directly upon his daily work. That is the main principle in the technical education of men. If we apply the same principle to

the education of women, it surely comes to this, that while they are working or taking part in the daily life of their home—which after all is the workshop during the greater part of their life for most of them—at the same time, in certain hours, they shall be acquiring the scientific or technical training in the arts and crafts which bear upon the home life. If the two are to go simultaneously, it forbids this particular kind of practical education for women being given in boarding establishments away from their homes. Again, there is an important difficulty, more or less of a physical character, that women are not suited for some of the most important agricultural pursuits, by reason of the roughness of the life which has to be lived. That, I think, goes without saying, but of course there are notable exceptions to it. If any lady or gentleman speaks upon this particular point, I am prepared to have notable exceptions thrown in my teeth, and by way of disarming any opposition of that sort, I may mention two or three in my own experience. There is in my own county, in the neighbourhood of Leatherhead, a lady who has made certain branches of agriculture her particular pursuit, and who has a world-wide reputation at dairy shows and cattle shows. There is another lady in the immediate neighbourhood of the little village of Bookham who has achieved a distinction—she is entirely her own gardener, she has no skilled gardener to assist her, but she has achieved a distinction—for her pears and various kinds of flowers, which are the envy of the professional gardeners of the whole district. And of course everybody knows about the ladies at Mitcham who produce our best lavender. But, speaking generally, women know little or nothing of agricultural life, and especially those who go out to

our colonies. When they go out, they have to take a much more active part in the various agricultural pursuits, and in the various kinds of work in country life, than they have been at all accustomed to in this country; and from my own experience of a very large number of women who have gone out and married in South Africa, a few in New Zealand, and a great many in Canada, I may say that they took absolutely no trouble in the majority of cases, or their parents took no trouble to prepare them for the place which they had to take in the colonial life of the home and the farm. Now I do not propose to go into details as to the various kinds of agricultural pursuits for which women are suited, but I may briefly enumerate a few of them. In respect to the question of dairy work, of which Lady Georgina Vernon has given instances of how it can be carried out successfully, I must point out as a practical man that I do not think the way in which education in dairy work is given in this country is exactly the right way for us to look at it to-day, from our point of view. The cry about the foreign production of butter—the butter of Denmark and various other places—is a very right cry, and a very proper cry, but I do not think it is going to be remedied by the instruction—admirable as it is—which is given to a very large number of women in our travelling dairy schools. There are economic questions which come in; there are questions as to the price at which you can sell milk, the facility of markets for milk, the fact that you can get milk to the market and sell at a profit: these complicate the question, and, I think, are not often taken into account when people are talking about dairy education. What I do say after large experience of the matter is this, that the work which is being done in

these schools, and the instruction which is being given, are admirably suited to make country life better and happier and brighter because of the better produce which is consumed at home. Now I know that in certain districts in my own county, where it is absolutely impossible for butter to be produced in large quantities and sent to market with profit, dairy schools have been a very great success, because the daughters of the squires, as well as the daughters of the farmers and labourers, went there and learned how to make a better kind of butter for themselves and their neighbours from the one or two cows they had at home, and not how to produce large quantities of butter to send to the London market. The facilities for instruction in dairy work are very large in this country, and it is not necessary to go into them in detail. I have, however, noted in reading the accounts of the various agricultural colleges in our colonies, in Canada, Australia and New Zealand, that nothing like so much attention is paid to the production of butter—the dairy instruction in the production of butter—as there is in this country; and I venture to suggest, if there are those here who are interested in agricultural education in the colonies, that I believe a very great deal of good would be done if the system of travelling dairies was more largely adopted in some parts of the colonies.

Now as to the question of horticulture and gardening. I am bound to say, and I will always say, that I cannot recommend women to take up the work of professional gardeners. I am perfectly well aware of the work which has been done—the work, admirable in many respects, which has been done in the women's department of the Horticultural College at Swanley, which is the only place where it is being done in this country—

but I cannot say that that work is tending to give women, who in their after-life will be otherwise unemployed, a thoroughly profitable occupation in the sphere of professional gardening. I find in their last report this statement: 'There are thus nineteen students only, out of eighty-two, who are willing and able to carry on their studies to such issue that they may be regarded as properly qualified for the profession of gardening. Of these, four are not at present desirous of accepting professional appointments.' I am absolutely convinced that, no matter how good an education you may give to a young woman up to the age of twenty-two or twenty-four, she will not, without many years of hard apprenticeship and very hard practical labour in the farm or in the garden, be able to take the post which is given to professional gardeners.

On the other hand, from the point of view of those who live at home, which has also been touched upon by Lady Georgina Vernon, I find this very satisfactory statement in the same report of the Horticultural College: 'It is, however, worth while to remark that among the students who do not fulfil these conditions'—that is, the condition of applying for professional appointments—'eight are or have been professionally employed. Many of those who have not studied for such length of time as is desirable for professional gardeners, are nevertheless doing valuable work in their own homes, under conditions in which less exact knowledge or varied experience is necessary than for those who are holding salaried appointments.' Agricultural instruction as well as dairy instruction for women should be generally in the direction of qualifying them for a more useful part in their own homes.

Then I come to the third point—the point touched upon by Mr. Reid—namely, the necessity of instruction in the domestic arts of cookery, nursing, home sewing, dressmaking, and subjects of that sort. I would suggest that those subjects should be made part of the general practical compulsory curriculum of every school where girls are to be taught, who are in any way likely to live a country life afterwards, or go out to the colonies. I say this most emphatically here, because anyone who has had experience of the agricultural districts knows that the farming population, the purely agricultural population, oppose nothing so strongly as the giving of this education to their girls, or the expenditure of public money upon it. I therefore would like most heartily to commend to your notice that little leaflet which is laid upon your chairs, giving an account of the technical school at Dunmow which has been started by the Countess of Warwick, where you will find very great stress is laid upon instruction in those subjects, and where also there is the probability of the great majority of the girls who attend afterwards living in agricultural districts. Now it is much more important —although it is not generally recognised—that this subject should be more thoroughly taught in the country than in the towns—much more important.

In country life you cannot buy things and you cannot get professional help with anything like the ease with which you can get them in towns at the present time in England. These subjects are taught largely and are taught well by our large School Boards, and by our County Councils and other bodies in all our principal towns, large and small; but they are not taught as they ought to be anything like so generally in the country. And we must also remember, as regards

country life, that they must be taught to the girls when they are comparatively young. In country life a woman of sixteen or seventeen is occupied for longer hours, and is under more difficult circumstances as regards her home work, than is generally the case in the towns. She has not so much leisure to improve herself, and therefore it is all the more necessary that these subjects should be taught to the girls in the country when they are young. Now there is one particular point I should like to emphasise as regards cookery. Cookery that has been generally recognised as suitable for the towns is not absolutely adequate for country life. Many things have to be made at home in the country which are not necessarily made at home in the towns. Such things as the making of bread, home-made wines, biscuits, and jam are not taught to any great extent in our ordinary country cookery classes, and I think that some steps should be taken, whether in connection with dairy schools or with other institutions, where women can be got together, to give longer and more important instruction in this subject. As to the importance of teaching nursing and first aid, where there are so many ladies present I need not lay emphasis on that. Every lady in the country knows that it is absolutely necessary, if life is to be saved in very important circumstances, that every woman should have some knowledge of nursing. I will not go into the details of the question of dressmaking, as I am not competent to do so; but there is one point which has struck me in noticing what goes on in our country districts, and that is, how few mothers know how to mend their children's clothes properly. Now, besides the minor industries, such as keeping bees and keeping poultry, which have been touched upon by Lady

Georgina Vernon, there is one branch of agricultural life in which women can be very useful to their husbands, their fathers, or their brothers, and that is in what I may call the commercial branch.

I venture to read a short extract from a paper which was read before the Royal Agricultural Society of England by Dr. Fream, the celebrated authority on agriculture, in which he says 'There is still another side of the farmer's life, which, for want of a better phrase, may be called the business side: not only has the farmer to possess a knowledge of the soil, the plant, and the animal, and to rightly appreciate his own relation thereto, but he has to face his fellow-men in the markets of the world. If he cannot successfully deal upon the markets, then his scientific education is practically of little use or value to him, for it is in the markets that the farmer must look for his final school of examination. No amount of scientific education, however thorough and comprehensive it may be, can be regarded as of practical agricultural value unless it is so made use of by the recipient that he can at the proper time focus, as it were, his energies on a given subject, and turn to the best advantage that which may come before him when he is brought face to face with the men from whom he has to buy and the men to whom he has to sell. A competent critic has dissented from this view because, as he says, it reduces the farmer to the level of a huckster. Admitting, however, that scientific knowledge properly applied will enable a farmer to produce better crops and to breed better animals, without increasing their cost, it is none the less a fact that unless the commercial capacity—the trading instinct—be well developed in him, his bargains are not unlikely to prove unprofitable.' Now, in my

opinion, what is here admirably called the commercial capacity—the trading instinct—is very much more strongly developed in women than it is in men; and if those who are to spend their lives in the country are given at their schools an adequate instruction in book-keeping, in the price of animals, and the price of produce, they can be of the very greatest help to their relatives who are working on the farm; they can do what many farmers are ignorant of—keep proper farming books; they can help them to drive their bargains, and so on. That branch of education—the commercial side—is one which I hope will very soon be taken up by women, because it can be as usefully applied in the business of the town as in the business of the country. I wish here to urge in conclusion that when it is taken up it should be given in such a way that it will suit women for country life as well as for town life. Everything which I have said to-day has been said with a view of showing that by giving to women instruction in these various agricultural pursuits it will enable them to supplement the work of men in the country and not to supplant them. The harmonious working of all members of the family together, every one doing his own part, one looking after one small industry, and another looking after another—that is the thing which makes the whole difference in the life of a farmer between profit and loss.

In the absence of Miss Hutchings (Lady Gardener at Kew), her paper on 'Women as Gardeners' was read by Miss Edith Bradley.

Horticulture for Women

Miss Hutchings

Although gardening for women will be considered by most people to be a new thing, in one sense it is by no means new, for there have been women gardeners from time immemorial; it is only of late years that the professional woman-gardener has come into existence, and has found a place in the great world of workers for their daily bread.

Average strength is needed for this work; but, given this, the outdoor life is found to be excellent, proving health-giving and exhilarating. Intelligence is needed also, and there is every reason that good material should be used to make good gardeners. The disastrous effects resulting from the old rule-of-thumb method are daily to be seen and noted by dwellers in agricultural districts and all thinking persons. The advantages of a knowledge of science must not be overlooked. The gardener and scientist should work together—the former will find her work much more interesting if she is acquainted with something of the physiology of her plants, their place in the vegetable kingdom and the relations existing between them, and she will also appreciate the value of such knowledge in dealing with the practical side of horticulture in many ways.

It is early yet to say definitely in which branches of gardening women may prove most successful, so we will only speak about some of these. The first is that of private gardening. Some women have taken charge of the home garden—growing garden-produce for the consumption of their own family, besides doing the

ornamental and decorative portions of the work. Others have taken charge of the gardens of those to whom they stand in the relation of employee. It is a position which needs a good general training. The nature of the work varies with the garden, which is planned according to the owner's taste. Often a certain class of plants is cultivated as a hobby. Then a special knowledge is required. Just now the craze seems to be for herbaceous and alpine gardening and the culture of orchids, while subtropical gardening is not regarded with so much favour.

Market gardening and fruit growing are also being taken up by women, and where they can employ labourers for the very heavy work, they succeed as managers. The question of profitable returns must rest upon the persons engaged in these businesses, but a great deal more might be done on small plots of land in the case of fruit, by growing only the best kinds, and growing them well.

The practice of horticulture is being taught in schools now, and in some is proving very successful as a physical exercise, besides encouraging the young minds to know more of the study of living plants, which are among the wonders of the Creation.

Swanley College is the best-known training place for women gardeners, and the number of students steadily increases each year. Practical work is happily blended with the science of horticulture, and by taking the full course of two years a good general all-round idea of gardening is gained, which it would, however, be advisable to supplement largely with other experience before taking a responsible post.

In the beginning of 1896 two of these students were taken on trial at Kew by the Director, Mr. Thiselton

Dyer, to whose kindness the success of the experiment is chiefly due.

This year the number of women employed at Kew is three. Too much cannot be said of the splendid training these gardens afford. The collection of plants is unique, making the work amongst them very interesting and the possession of brains a necessity. All work is well supervised, although at the same time each gardener is made responsible for his charge.

In conclusion, we wish and hope for the movement all the success it deserves.

ALICE HUTCHINGS.

The Chairman invited the Hon. Mrs. Joyce, Vice-President of the United British Women's Emigration Society, to open the discussion.

Mrs. Joyce only wished to bear testimony to the great value of the Colonial Training Home at Leighton Salop, in fitting women to become colonists. One hundred and thirty women, now distributed over different parts of the British Empire, had been trained in this home, which provided a link—the missing link—between idleness and profitable employment.

Miss Goodrich Freer (Hon. Secretary, Swanley Horticultural College) replied briefly to Mr. Macan's remarks concerning the College. Miss Freer pointed out that a large number of ladies went to Swanley for the sole purpose of learning to manage their own gardens, and it was therefore unnecessary for them to take the diploma or go through the course; at the same time, those who had been trained at the College had always found remunerative employment.

Mrs. Orpin then spoke about Irish Flower Farms.

In listening to the admirable paper which opened

these proceedings, I cannot help being struck with the fact that hardly any of the advantages that were supplied to people in England could be made use of by Irish women. I want to engage your attention upon the subject of flowers and fowls in Ireland. When I heard about that college for teaching gardening, and when the figure for the cost was read out at 70*l.* a year, I thought to myself that you might as well offer to Irish ladies a chance of buying the Kohinoor as of going to Swanley College. They have not 70*l.* to spend on anything; they have to get it first. The ladies about whose business I know something are all poor women; we are all poor in Ireland, everybody, men and women, but the women are especially poor, and they have to face this problem of how to get a little money out of a piece of neglected land. A good many of them have faced that problem and have got the money—it is very little, but they have got it. One lady in whose progress I am very interested started with a big capital of 11*l.* Swanley College and 70*l.* a year were as far off from her as the moon, but she had a piece of fairly good Irish land, all run to weeds. She had not even money enough to turn over all that land the first year, and being a very prudent woman and knowing exactly how many shillings there are in a pound—a very essential piece of knowledge—she only turned over a quarter of her little piece of land, and she put into it daffodil bulbs. Daffodil bulbs are a kind of Irish commodity, the more they are rained on the better they are—and that is a very fortunate circumstance, because of rain there is a great abundance in Ireland; therefore this lady's daffodil bulbs flourished. The next year she turned over another little bit of her waste land and brought one half of it into cultivation. She then put

Mrs. Orpin

in a double quantity of daffodil bulbs, and I am proud to say that last year she cleared 35*l.* That is what I call very good business—very small, but very good. Now, in Ireland that is the principle to go on—to look after the pennies in every respect, and as you amass a small capital put it into the ground, and see if you can—not double it, I do not believe in doubling capital in Ireland—but see if you can add a little fraction to it year by year. Another lady who has been a rather large business person put 150*l.* into her land: she had two acres (Irish acres are rather more generous measure than English acres, I believe about one-fourth more—she had about two and one-third English acres). She put 150*l.* into her land, and she has been turning over that capital for seven years with the utmost success. She told me that last year was the first year in which she had received a slight check, in her violets, because the market was over-stocked with violets from Naples, and she could not compete against them, but like a thoroughly sensible business woman she instantly weaned her affection from the violets and put in daffodils instead. She said that the first thing to learn was to begin with a very small capital and a very small piece of ground, because your mistakes do not cost so much when you begin with a little. That is an intensely valuable piece of information, because, mind you, you have to buy experience and pay for it, everybody for themselves, and if you can buy your experience cheap and sell your daffodils dear, why, there you are! Some gardens in Ireland will not act according to rule—in fact, nothing does in Ireland—and when the gardens are examined you are told by wise persons that they contain this, that, and the other in the way of chemicals, and that they ought to do this, that, and the other—but they do

not do it; when you try them they do not do it a bit, they do something quite different. One lady started to grow daffodil bulbs in order to supply a large firm of Covent Garden people; she grew magnificent blossoms of every kind of beautiful daffodil, but the bulbs all dwindled away—there were no bulbs at all to sell. This was rather a shock to her, because she thought it meant ruin, but she took counsel with her common sense, and she said, 'Well, my garden will not produce bulbs; I will give up bulbs and I will take to flowers instead;' and she took to flowers and gave over trying to do what she could not manage, and, having a spare piece of land, she covered the place with currants, red and black, the only thing there is a market for in her vicinity. Now, the first thing in order to make a success of gardening or anything else is to know what one can do, and the next thing is to know where one can sell it. You are constantly being met with all sorts of difficulties in Ireland, but you must learn to use materials that you have; you must not be striving after those which you have not. Now, the great difficulty with us in Ireland is the market; we have not got it, and what we want is to get hold of the London market. It is a perfect heaven to all Irish people who have anything to eat to get it into London, because London eats everything. And there we come to the very crux of the whole matter: How can we get our things into the London market (or into the markets of the other great English towns: they are all just as greedy as London)? Some people tell me that it is no use sending anything more to Covent Garden, it is full up, but that Manchester and Birmingham are still pining for Irish flowers. There is an opening for some Irish lady to work the Manchester and Birmingham markets.

Then there is another thing, too. Ireland is behind the times very much, especially in the season, and the weather. We cannot possibly compete with the Channel Islands and the South of France—it is hopeless; but when their season is over Irish flowers are then in perfection, so our market must come when theirs is finished.

Another difficulty is to tell what ladies will like next in the way of flowers; some ladies in some places like one thing, other ladies in other places like another. Fortunately, the taste for daffodils has set in strong; and long may it continue, because Ireland grows the most superb daffodils, and even Irish rain cannot wash the flowers out, although it tries very hard. I have had daffodils grown in Ireland without one ray of sunlight; they were picked for me, and they came just as fresh and just as good as if they had flourished under the best conditions. But the constant rain in Ireland is a frightful thing for the growers. It interferes with everything, from business to pleasure; there is really nothing that it does not stop except a political meeting. Now with regard to poultry. I would advise all ladies to keep flowers and chickens—not, mind you, in the same enclosure, as they do not agree—but on the same land. If you have enough land to start flowers, it will pay you well to add another little grass plot for a chickens' run. Chickens, I have come to the conclusion from long experience, are a strictly feminine product. I do not mention that as a piece of zoological knowledge, but they are best handled by women. A man does not make a success of it, because he thinks the chickens are muddling sort of creatures that you can run along on all fours with some other business. One lady who has made an extreme success of her poultry-

keeping wrote to me to the effect that, except for the rain, Ireland was a very good place for chickens, but that the rain stopped their laying eggs in the wet season. I think she must be mistaken, because I know for a fact that the rainy season lasts the whole year round, but the hens do lay. But the eggs from Ireland might be a splendid source of income if you could only get them at the right time. The Irish eggs come in when the regular flood comes from the Continent, at the same time in fact, in the spring and summer months, when eggs are plentiful and cheap. What is wanted, if we could only manage it, for Ireland is some means of keeping over the eggs. I do not think it is possible to keep over the hens, because they will lay when they are so minded, but it would be a fine thing if we could possibly keep over the eggs. There is an old Irish custom of buttering eggs; I do not know whether it is common in the English country districts, but it is universal in Ireland, and it works admirably. If the eggs are thoroughly buttered they will keep perfectly fresh for weeks and months. I have tried them, and I am extremely particular about eggs, and they will keep, provided you stand them the right way up. In that way they will last a very long time; I have not found the limit myself from experiments, but they certainly will last to my knowledge for seven weeks, perfectly marketable, perfectly good and fresh, fit to be boiled for breakfast. If it were possible to preserve Irish eggs by buttering them and thus to keep them over the flush season, so as to put them into the English market when eggs were dear, there would be a chance of making a very large profit. Then there is another thing about the packing of eggs. There are just three things wanted to pack an egg—hay, paper,

box. Wrap the hay round the egg first, and then put the paper to keep the egg in position; then you may safely send twenty dozen in a box to London without damage to a single egg. I have done it over and over again.

Let me say in conclusion that to make anything pay, whether flowers or poultry, it is necessary to be careful to stop every unnecessary expenditure or waste, and in order to do that ladies who go in for farming must see to it themselves; they must not delegate it to anybody else, because a lot of servants or underlings are very wasteful when not carefully looked after.

I think that women are very well able, in Ireland and elsewhere, to look after both poultry and flower farming for this reason, that women's minds are extremely practical and they take an interest in details. I do not think they take an interest in large questions, but they take a most absorbing interest in tiny details, and it is by paying attention to the tiny details in the dairy-farm, the flowers, and the poultry that they will be able in the long run to make them pay. It is useless to put a lot of money into a farm if you are not able to look after the practical working of it. As one of the ladies who wrote me her personal experience said, 'the only rule that I follow is to be familiar with every detail of my work, and not to be above doing myself every single thing that should be done on my farm.'

The Chairman then called upon Professor Robertson, the well-known Dairy Commissioner of Canada, to tell the Congress what was being done for Agriculture in Canada, the premier Colony of the Empire.

Agricultural Education for Women in Canada

Professor Robertson

Canada is a very large country—half a continent—and I shall not attempt to tell you much about much of it. There are thousands of acres of fertile land waiting for men and women from Great Britain to make a good living on them. Our Governments are interested in all educational movements that will help the people to make the most of themselves, to do the best for themselves, and to have happy homes for their families. We are of the British race, with the addition of those gallant, dainty, and economical traits and tendencies which come with our citizens of French origin. We look to London and Britain for guidance and inspiration in all kinds of educational matters. While Canadians do not take much part in this Congress, we hope to see a full report of it, and to send broadcast over our country whatever of good thought, apt to our needs, is presented here to supplement the efforts of our educators.

In Canada, agricultural education has been almost only for the men. The outdoor labour on the farms, in the gardens, and in the stables has been done mainly by men; and we hope to keep that condition of affairs going as long as our country lasts. We are not ambitious to have our womenfolk do the farm work. In our land we have a rather extensive kind of agriculture, not the intensive hand-cultivation that prevails in these islands, where land is scarcer and labour more plentiful than with us. We do all we can to lift the dairy labour which women have been doing in the farmhouses out of these homes and have it done by men in co-operative factories. In our dairy work we are trying

to lead the farmers' wives and daughters to give up home butter-making, and have it done in creameries.

We want both men and women to carry on the work of agricultural education. While the men do the executive manual work, the important part of farming in Canada is the management; and the women render invaluable assistance in that. The opportunities from the soil, the climate, and the markets are getting more nearly alike for all people nowadays. We can send eggs, poultry, honey, butter, cheese, meats and fruits from Canada, 3,000 miles away, about as cheaply as from Ireland or Scotland into London; and we can send them just as safely. Our eggs need not be broken, our butter does not become stale, our cheese continues mild, and our fruits arrive in good condition, because we have cold storage all the way for keeping these things from spoiling.

That being so, our farming people in Canada do well or do badly as they manage well or badly. One man may live on good land and manage badly; his buildings take on a tumbledown appearance; his children do not go to school; they have few ambitions and no aspirations. Another man may live on poor land, and manage well; his buildings look snug and comfortable; his family are progressive, capable, industrious, and aspiring; they are doing good work for the community. The difference between the two is usually that the second man's wife—and women are the best citizens—manages everything well, including her husband—in fact, makes the most of things. In consequence he makes the most of things, and the family becomes prosperous in agriculture and everything else.

To develop ability and capacity to manage well is

doubtless the chief use of education. Does any schooling, training or acquiring of knowledge deserve the name 'education,' unless it makes the individual competent to manage the ordinary affairs of daily life in the sphere in which he is called upon to live and labour?

I am glad to know that some women go out from Great Britain with this best class of education. It is not that they know exactly what they will have to face and do in a Colonial country. The attainment which is worth most, is to be informed upon those principles which enable one to do the best under and with all kinds of circumstances.

In educational work in Canada the Governments help a good deal. We have a Federal Government for all Canada, and we have provincial Governments for the provinces. Educational matters come under the control of the provincial Governments. In the large province of Ontario, where there are over two millions of people, the provincial Government has a large agricultural college and experimental farm. The location is at Guelph, Ontario. The fees for the year's education there for an English student are 20*l.*, plus the board, which comes to about 10*s.* per week. Each student may earn one half his board money by working on the farm, in the stable, and the gardens, thus getting practical training to supplement the lessons of the class-rooms. In the winter months there are short courses in dairying which last ten weeks, and any woman can attend and get the training practically for nothing. There are agricultural colleges in other provinces of Canada; but the women do not attend the classes, except the short winter courses at the dairy schools in New Brunswick and Manitoba.

The masses of the people everywhere do not go to colleges, and if the women on farms are to be helped you must carry the instruction to them. We try to make agricultural education available to all our people, and some of it unavoidable by them. We have what are called travelling dairies. A simple outfit for the making of butter is provided. It usually consists of a hand-power centrifugal cream separator, a Babcock milk tester, a revolving barrel churn, a butter worker, a pair of weighing scales, two thermometers, pails, strainers, dippers, and a few other necessary utensils. The whole apparatus can be packed in boxes and loaded on a horse-waggon, or sent by train. The weight does not exceed 500 lbs. Usually one travelling dairy instructor, who is an expert butter maker, and an assistant go together. The travelling dairy spends one or two—usually two—days at a place. A local committee arranges for a suitable lecture-room—which is frequently the town hall—and also for a supply of milk and cream. Two meetings a day are held, at which practical demonstrations of the testing of milk and the making of butter are given. The instructor gives explanations as the processes are carried on, and an hour or so is given to a simple lecture and discussion. Two visits of a travelling dairy to a place bring about a marked improvement in the quality of the dairy butter. The women see the use of the apparatus, watch the methods of handling everything, and learn something of the principles which underlie them. The neighbours who may not have attended the meetings of the travelling dairy learn from those who did. Of course, in many of the districts there are farmers' wives and daughters by the hundred who did not need such

instruction; but many of those are the keenest students.

What are called farmers' institutes are educators of exceedingly great value in rural communities. They are voluntary associations of men and women similar in organisation to farmers' clubs for the discussion of matters affecting the agricultural interests of the locality. One may be formed in every electoral district, and receive a small annual grant, usually 10*l*., from the provincial Government. To entitle to the grant there must be fifty members, and at least two public meetings annually. The institutes in the province of Ontario may be taken as typical, although more advanced than those in the other provinces. There is now a Government officer who is superintendent of farmers' institutes for the province. He arranges for several corps of speakers, who attend meetings for one, two or three months. These men are expert authorities on some particular branch of farm practice. During one month each corps of speakers—and there are now, I think, ten or eleven of them, composed of from three to five speakers each—includes a representative of the Ontario Agricultural College, who may be one of the professors or the head of a branch. The winter meeting of an institute usually lasts two days. In addition to the lectures from the visiting speakers, there are addresses and papers from men and women of the locality. By these means the best information of the best informed on the particular subject is put before the others. What was before the possession of only the few is made common property for all. Discussions clear away the indefinite and bring out the apt, practical, and helpful points. These meetings are attended by men and women; and at a few of them

there are demonstrations in cooking, and papers on household economy. When the institutes were begun in 1885 the questions asked in the discussions were often of a purposely puzzling sort. Now they are eager inquiries for information which can be turned to practical benefit. They carry useful information direct to the homes of the people, and we find that our people are exceedingly receptive of all information of that kind.

We are not quite so conservative in some respects as the people of England, Scotland and Ireland. Our people are willing to adopt new methods more readily than the people are here; and we have the happiness of a Government which is sometimes dubbed 'paternal' but which is often willing to buy information by experiments at the public cost with great gain to the country. The agricultural population have enough confidence in the Government to know that they may accept the conclusions to which their responsible officials come. They can thus acquire knowledge which will save them from paying too dear for experience, and the knowledge from those official sources is often more widely useful than the experience of the individual would have been. In all the provinces we have these; and the Dominion Government publishes very extensive reports of the experimental farms and bulletins on agricultural subjects. These little papers are like enlarged tracts on agriculture, giving succinct information upon the work of the farm as women do it in the homes and as men do it in the fields, stables, and out-buildings. These bulletins are sent over the country in large numbers at the expense of the Government.

Then our newspapers in Canada, which are very numerous for a small population—we have over 600

of them—usually give a whole page a week to agricultural topics. That page is scanned in Canada with almost the same care and, I think, rather more profit than the fashion plates and pages are scanned in this country. Of course, the women in Canada like the fashion pages and papers as well. Thus our people are making some progress in knowledge as to how they can make the most of our vast country. We believe that in making the most of it we will continue to send food products which will keep the people in the United Kingdom better fed than they would be if they depended for their supplies on Denmark, France, Germany, Russia, the United States, and other foreign countries. For the first time the seat of a world-wide Empire is in a northern country. I have studied the food question enough, by growing all kinds of plants and domestic animals for food, to know that unless you get the staple foods from the northern zone, you cannot have the brawn and the brain, the muscle and the mind, that will maintain the supremacy of this Empire. Rome went down in luxury because she had grapes and delicacies. The best fed people are the strongest and most masterful people; and Canadian flour, and butter, and cheese, and meats, and poultry, and eggs, and fruits are just what this people needs. They make the bodies strong, the muscles tough, and the brain fit to stand the strain of modern competition. What holds the Empire together is corn and sentiment—the food of its people. These are more than armies and more than navies. If people have not the proper kind of foods, and plenty of them, in a very short time their bodies are badly nourished, they become frail, and give way when a severe stress comes.

We in Canada are trying to do our part for the

safety and continued greatness of the Empire in this and other ways; and our women do their full share. Canada has the advantages of supplying wholesome products for the bodies and educational advantages for the minds of the people. As the Empire becomes more consolidated, I think you will find that Canada, its premier Colony, is a daughter well worth cherishing, a daughter fully able and willing to pay back to Great Britain more than an equivalent for all that Britain may do now by giving a real preference for everything she sends over.

I thank you for listening to me. If any of you, instead of taking your holidays elsewhere, will come to Canada, we will show you everything we can; and if you cannot throw in your lot with us, you will see more than sufficient to incline you to influence those whom you may know to be contemplating emigration to turn their faces our way and stay within the Empire. I shall carry back from this Congress some report which I hope will help us, and thus help you, to more food products, and those of better quality.

Professor Teegan, Principal of the Marlborough Street Training College, Dublin, then continued the discussion.

Professor Teegan

We all agree in Ireland that it is essential for our agricultural industries that the best and most complete system of training should be provided for women; we are at the same time all agreed that by that system women should not be burdened with the more onerous duties of agriculture which in these islands I am happy to say have been generally reserved for men. In view of that fact, and

the fact that the vast majority of Irish cottagers at the present moment have small plots of ground attached to their little homes, it would be most important that a system of schools should be provided in Ireland to give instruction to women especially in horticulture. I am sorry to say that there is not in all Ireland one school for that purpose maintained by the State.[1] With respect to instruction in dairying—which is again most important to women—under the Commissioners of National Education in Ireland a system of training has been provided. There are two large agricultural institutions in each of which instruction is provided in dairying, in poultry-keeping, and to a slight extent in horticulture. During the last five years, 700 pupils have been trained in these two schools. Numbers of those returned to their homes to carry into effect the instruction they received in the schools, others I am very glad to say are employed as instructors in dairy schools in England, and very many by the County Councils; some get married and give effect to the instruction which they have received from the schools in their own way. But with the exception of those two schools there are no State schools in Ireland in which any practical education whatever is imparted to women. The Chairman in his opening address hinted

[1] As a definite result of this sitting of the Education Congress, Prof. Teegan, Principal of the Marlborough Street Training College, Dublin, writes that a portion of the grounds of the suburban residence of his College has been set apart for the instruction of the Female Queen's Scholars in practical horticulture. Extensive additions are also being made to the building in order that it may accommodate 200 female students, all of whom will receive instruction in practical horticulture, which they in their turn and in their capacity as teachers will spread over Ireland. The Commissioners of National Education have now included this subject in their programme for National schools. This is a significant fact.—SUB-ED.

that I might say a few words on the system of agricultural instruction in France, and I shall be very brief. In France, in the primary schools, the agricultural instruction is commenced; those sciences which form the foundation of all agricultural instruction are imparted in the primary schools to both boys and girls. When a child leaves the primary school there is the higher class of school of a technical, agricultural, and literary character. When the young student is prepared to leave that school, there are a number of agricultural schools and colleges in nearly every department of France in which the instruction is practically free, with the result that in the course of instruction there is a continued change from the primary school to the higher agricultural colleges. We all know that about a quarter of a century ago that country was trodden to the dust; it was not until 1882 that the French people were able to set themselves seriously to establish agricultural and industrial schools, and if in that short period the French people have been able to provide an almost perfect system of agricultural instruction, surely our great Imperial Government, which never was conquered but which has been conquering for 700 years, ought to be able to provide some such system for a poor country like Ireland. That system has not been provided, and I regret to say that at the present moment there seems to be no more indication that it will be provided in the near future. There is one other influence which I think I ought not to pass over, which is working in Ireland, and has done remarkable service in connection with the agricultural education of women. It is to that influence that we owe the system of creameries, some worked on the co-operative system, some as private ventures, which in recent years

have done much to restore to the Irish butter trade the pre-eminence it had once enjoyed in the markets of the world. That influence is the influence of the right honourable gentleman who presides here to-day. About a dozen years ago, when Mr. Plunkett and Lord Monteagle and others undertook to persuade the Irish farmers to combine and establish creameries in which butter of a better quality could be made than was usually made in the homestead, those gentlemen met with the usual opposition that all educational reformers meet with in these days. Mr. Plunkett, however, pursued the even tenor of his course; he had energy, and sustained by an intense desire to improve the material interests of Ireland, he deserved success, and he has won it. At the present moment there is not a man in Ireland who does not acknowledge that your Chairman has done more for agricultural education in ten years than the Government has done in a quarter of a century.

Miss Evelyn Windemer, a former student of Swanley Horticultural College, gave her experience as a 'Governess Gardener' in Donegal. She had won the Royal Horticultural Society's second-class certificate, and also held others from the British Bee-Keepers' Association. Her duties lay between instructing a little girl in the usual school subjects as well as gardening, and in teaching bee-keeping to the Irish people in a district extending about fifteen miles along the coast of Donegal. On the whole Miss Windemer had found her classes very successful, but noted in passing that out of forty bee-keepers the four most intelligent, and fearless in the matter of stings, were women. There still existed in Donegal a prejudice in favour of skeps over bar-framed hives, but this Miss Windemer hoped

would be removed when the superior quality and amount of honey to be obtained was realised. One great difficulty was to find a ready market for the sale of the honey.[1]

Major Craigie, of the Board of Agriculture, was then called upon by the Chairman:—He said I wish to urge the attention of those interested in educational work to a fact not always realised, that without looking exclusively, or even so much as we have been doing to-day, to the sister island of Ireland, we have in these adjacent islands of Great Britain a much larger proportion of small farms (and therefore of women interested in agriculture) than is commonly believed. The fact that we have more than 500,000 occupiers of land in Great Britain necessarily implies a very large dependent and interested female population, whose better knowledge of the processes of applied agriculture it is our desire, and it is the desire of every Government, I am sure, to encourage and to promote. While I fully approve of the suggestions which have been made with regard to the training given to individual women for individual work upon their own behalf, as opportunities of that sort present themselves, yet from a rather broader point of view I should like to urge the desirability of interesting women in those scientific and general questions connected with agriculture, which may make them helpmeets in the work of agriculture itself in the farmsteads of this country. Two-thirds of

Major Craigie

[1] This difficulty is not confined to Ireland, it is one which has met the English cottagers this year (1897). Honey has been very plentiful, but they could not get more than $4\frac{1}{2}d.$ or $6d.$ per lb., though the consumer has to pay $11d.$ to $1s.$ $2d.$ per lb. at the shop or store. Whilst middlemen insist upon exorbitant profits, is it likely that cottage industries will succeed?—SUB-ED.

those half a million occupiers rent farms of less than 50 acres, and the position of the woman—the wife or the daughter assisting in the work of the farm—is an essential and important economical element in the product of the food of this country; and in these days of competition it is only the very highest and best types of each particular product that can possibly pay. I am quite sure that with the ready tuition of the female mind, once instructed, once encouraged to take up this part, the man who has to spend much of his time in the open air may rely upon feminine help for a great part of the work of the farm; not only upon questions of dairying or of poultry-raising—those essentially must fall to a woman's share—but I would even say, with reference to the more scientific questions of entomology, that a woman's knowledge of the insects and the pests and the means of meeting them on the fruit-trees and the crops of the farm would be of immense advantage to men who cannot give time to that work. And I would say also that chemical knowledge spread among the women of the country would be of great value to the farmer, because his 'domestic expert' at home could assist him in many cases. Therefore I would only add that we should encourage in every way the training of the women of this country, of all grades and of all ranks, to take part in the great work of agricultural production, by perfecting that production in order to produce the best type of articles in the most economical way which education tells us can be done, and can be done successfully. I should not like to finish without saying, on behalf of the Department with which I am connected, that a good deal is done by Government aid, and by the aid of County Councils endowed with Government money, to promote the teaching of women

in this country. At this moment I am very hopeful that through the organisations which we are assisting a considerable work is being done, which may bear fruit, directly, in aid of the individual who has to earn her own living, and, indirectly, in leavening the whole lump of the agricultural community of this country, and bringing them forward in the race—which is a very hard one, but one in which I think, with the old British pluck, we are not going to be beaten, neither will we let the production of this country be beaten by that of any other, if by a little guidance and a little help from the ladies we can hold our own. Surely we shall have done a good work, and this Congress will have done a good work, in directing public attention to the necessity of educating both men and women in the scientific processes which underlie agriculture.

The Chairman then announced that Miss A. Bateson, who had brought some splendid specimens of flowers and tomatoes from her market-garden in Hants,[1] would gladly answer any questions put to her after the meeting, instead of making a speech at this late hour of the proceedings.

Miss Agar, Horticultural Mistress at Wycombe Abbey School, and also a former pupil of Swanley College, said that the plan of teaching gardening to girls as part of the regular school routine was succeeding very well at Wycombe Abbey. Each girl had her own garden, and the classes came for their lesson on gardening with the same regularity with which they went to French or English. They had also the advantage of a workshop where they were taught carpentry,

[1] *Facts for Women.*

and already some of the girls had made a wheelbarrow and large and small frames, even doing the glazing. After the first trenching they did all the digging and other necessary work in their respective gardens under supervision. Amongst other things they had learned to bud, and at this they showed great dexterity. The out-door occupation was most beneficial to pupils and teacher, and it would be well if other schools could take up horticulture as part of their curriculum.

Miss Windeyer of New South Wales said :

Miss Windeyer

There are only one or two things I wish to point out. New South Wales is one-seventh part of Australia and covers 310 square miles; from that and from the neighbouring colony of Victoria, which is rather smaller, we sent to Great Britain last year 17,000 tons of butter, and this speaks something for the quality of the butter we make. There is very little of the hand-labour that women used to give. The butter that comes to England is nearly all manufactured by machinery, and the old method of setting pans of milk is rapidly disappearing; it has disappeared from all the people who wish to make anything like a true profit out of a dairy-farm. Those people who milk only twenty or thirty cows a day may still set pans, but anybody who milks over sixty has to have some sort of machinery, which is much better. In Australia in our agricultural college we know, of course, of the great work which the Canadian Professor (Professor Robertson) has done, and he and his researches are quoted there as an authority. In the Government agricultural college there are ninety-six boarders—of course, all young men. Women may go and live in the neighbouring town and take a

course of bee-keeping; this has been allowed ever since the college was started five or six years ago, but I have only heard of one woman who took a course of bee-keeping at the Government college.

The introduction of machinery has so largely altered the social life of the women on the farm that now the opportunity has come for the women of leisure to start such things as book clubs and home-reading unions for the women on the farms, and in a number of districts that has been tried and has met with great success.

Butter-making that is done in the big factories is scientific—absolutely scientific; the first-class factory has a brand that is as valuable to it as the registered trade-mark of any of the great firms of Sheffield or Birmingham, and it is a point to know that the name of the factory is a guarantee that you have a good article. Very little cheese is made by women—I might say it is made by none—but the Government college sends to England hundreds of cheeses every year. I do not know what markets they reach, but they leave Australia and go to the British Isles somewhere. So the men of our colonies are not behind-hand even if the women are so privileged that they do not have to work at any hand butter making.

The Countess of Warwick proposed a vote of thanks to the Chairman in the following speech:

The Countess of Warwick

Mr. Plunkett is doing such a splendid work, his name is so well known, that I am sure you will agree with me that we have been very fortunate in prevailing upon him to preside over this last sitting of our Congress.[1] We have had three most interesting days. The presence of many of our

[1] Agricultural Education for Women was the last subject on the pro-

Colonial friends made the first afternoon's discussion of exceptional interest. Yesterday we had a very full day, and most valuable papers were read on Indian education and medical subjects. To-day, I think the limit of time has been long overstepped, and we are still here, and it would have been well if we could have remained longer, as the papers and speeches have been deeply interesting. To us who live in agricultural districts, to us who are seeking for the solution of the problem of making a living, this morning's discussions are of absorbing importance. Mr. Plunkett's work in Ireland is well known, and there are many ladies on this platform whose names are equally well known in connection with every practical movement in that distressful country, but I venture to think that there are parts of rural England as sorely in need of organisation and properly trained women as any of the Irish congested districts. It seems to me that this morning's congress has shown very decidedly that the one thing to do is to *train* and to *organise*, so that in the days to come—in those good days that are coming for women—there may be no question of difference of efficiency in trained and skilled labour between men and women. I wish to propose a hearty vote of thanks to Mr. Plunkett.

This was seconded by Sir Douglas Galton, and the Congress rose.

The Training of Women in Business

In the absence of the Countess of Warwick, who had promised to preside at this Conference, the chair was taken by the Duchess

gramme to be discussed at the three days' Education Congress, July 12th, 13th, 14th. Hence the above remark of Lady Warwick. A different arrangement has naturally been followed in the present book.

of Sutherland. In a brief introductory speech her Grace said it gave her great pleasure to be present on that occasion (although she knew the absence of her sister, Lady Warwick, would be regretted by her audience), because it enabled her to express the deep sympathy and interest she took—an interest second to none—in the progress and aspirations of women. This was a time when each woman must gravely feel her responsibilities, not only for herself, but for those who were to come after, and nothing would enable women better to meet these responsibilities than careful and systematic training in their early years. Therefore she welcomed the chance of hearing the three papers which were to be read, by ladies who had had great experience in the subject, and she trusted that the result of that morning's Conference would be to force upon the general public the absolute necessity of systematic training of the best kind, as the first step to any profession or business.

Her Grace then called upon Miss Cecil Gradwell to read her paper on 'The Training of Women in Business.'

Miss Cecil Gradwell

Among all the branches of women's work which have opened out and developed during this glorious and eventful Victorian era, I venture to claim a very prominent place for that which has sprung from the discovery of a faculty for business in women, its practical application, and the very great success to which many women have attained in lines of occupation which, not only at the beginning of our Queen's reign, but until within perhaps the last fifteen or twenty years, were exclusively confined to men.

It would have been, I think, both interesting and instructive to trace the start and gradual progress of women in careers of business, but owing to the absence of reliable statistics the task appeared to be one of considerable difficulty, and I soon realised that it would not be possible, within the limits of one paper, to deal at all adequately with so wide a subject. In

narrowing down the scope of my remarks to the present day, it follows almost necessarily that I must further confine them to one class of women, and one only. And here, at the very outset, I am faced with the difficulty of defining this special class so that my hearers and I may be at one. In a most interesting article which appeared in a recent number of 'The Queen,' the writer points out the misunderstandings that may arise from using as interchangeable the expressions 'lady' and 'educated woman.' As my remarks are intended to apply mainly, if not exclusively, to 'ladies' in business, I think I cannot do better than give the writer's definition of a lady, 'as a woman who appertains by birth and breeding to the rank of gentlefolk.'

It is usually assumed that, even outside business circles, most men possess a general knowledge of business. Some maintain it comes to them naturally, but I fancy it is rather because they have the *command of money*, earlier that they come more in contact with business people, and no doubt find more interest in listening to discussions on business and financial topics. The time, perhaps, will come when women will also possess naturally this general business knowledge, but as things are at present it seems that they can only attain to it by specific education.

People attach such different meanings to the terms 'business' and 'business-like' that I may perhaps be permitted a word of explanation as to the sense in which I understand them. We all know that those engaged in trade and commerce have from time immemorial adopted a certain fixed routine for the purpose of keeping their transactions in proper order, and for regulating their dealings with their customers.

It is absolutely essential for the proper conduct of their business, and results in habits of accuracy, regularity, order, method, and punctuality, which are well worthy of imitation. When therefore we speak of business-like people, we mean people who have adopted, to some extent, the habits just alluded to, and I think my readers will agree with me that it is a term of high praise to apply to both men and women, whoever they may be, if we speak of them as business-like. I would even go so far as to say that business-like (in the best sense of the word) and reliable are almost synonymous terms. It is only fair to assume that these qualities must be possessed in a high degree by the very many *successful* business-women who are to be found in London at the present day. Within the last decade especially, large numbers of educated women have embarked on undertakings or entered upon occupations for which considerable business knowledge and experience are absolutely essential to success. We have prosperous lady traders of many descriptions; we have type-writing offices, printing offices, and agencies of various kinds, entirely controlled by women; there are women on the boards of limited companies; there are a few—not very many—stock-brokers, accountants, and auditors.

Let us pause a moment, and ask ourselves how these women in the first instance gained their experience, how they were primarily armed to step into the arena of the business world. That they possessed courage, tenacity of purpose and, to a great extent, originality is a matter of course, and I think that many of them must have had a good deal of amateur experience in the lines which they adopted for their professional careers. But though I would not on any account detract from the honour that is due to them

as pioneers of women in business, I venture to suggest that they owe a good deal of their undoubted success to somewhat adventitious circumstances. In the first place there was the novelty of the thing, and this in itself found them a public. And it was a lenient public —a public willing to excuse many deficiencies—and to condone even failures. On the part of their friends there was a somewhat amused tolerance, a dubious, half-pitying encouragement, mixed with a good deal of genuine, kindly helpfulness.

But I do not think that those who now start on similar undertakings can, or ought, to rely on these adventitious aids. The idea of novelty has worn off, a more critical and certainly a more matter of fact view has taken its place. I have therefore no hesitation in saying that the woman who now succeeds in business will do so owing either to the high quality of the article she produces, or the excellence of the work she does, and I am *quite* certain that, though our predecessors had from necessity to dispense with a regular training or apprenticeship, the would-be business woman of the present, and certainly of the future, can *not* dispense with it. A higher standard of efficiency is expected from her, and the same patience and leniency will not be meted out to her. But though this fact has undoubtedly to be faced, there are compensations also. In many respects a woman now finds herself in a much better position than those who have gone before. They have, to their great honour, cleared the path of many difficulties for their successors, and can give them the benefit of their experience, and we may confidently believe that they will extend a helping hand to those of their fellow-women who now stand on the threshold of the working world. *Here*, therefore,

do we find the *possibilities* of a business training for present-day women in the *experience* and *success* of what may be termed the advance-guard.

I propose to divide under three heads the different classes of women to whom an education in business may fairly be considered essential.

First, the woman who is possessed of money, be it of large or small amount, for the management of which she has to depend upon herself; second, the voluntary workers in London and our large towns; and finally, those—by far the greater number—who are under the necessity of earning their living.

A considerable part of my own work is among women who come under the first category, and my experience is that, as a rule, women possessed of large fortunes are equally possessed of considerable business knowledge, while those who have a competence—or, a far larger class, those who have just enough to live upon without the necessity for working—are too often almost inconceivably ignorant and are absolutely at the mercy of unwise or even unscrupulous advisers. My hearers would, I think, hardly credit me if I detailed the difficulties I experience in obtaining accurate information as to the nature and amount of their incomes from those who come to me for help in escaping from or in lessening the burden of income tax. One will tell me she has lent money on mortgage, but knows neither the name nor the situation of the property which represents her security. Another assures me she has 2,000*l.* Consols, while as a matter of fact the investment is in Metropolitan Board of Works, or Corporation Stock; and a third details her income from stocks and shares, and asseverates—in perfect good faith—that this represents her entire income; but a further cross-examination

enables me to ascertain that she has a life use of certain property or has a Government annuity.* 'But surely,' she says, 'that is not income, the capital is not under my control,' or gives some such equally intangible reason.

Hardly a week goes by that I do not hear a sad tale of money lost through the bad advice or mismanagement of a solicitor. I am certainly not holding a brief for the men of law, but I assert without fear of contradiction that in many cases the loss has occurred through women not grasping the significance or even understanding the terms used by their lawyers, and therefore giving their assent to some course of action, with an entirely insufficient knowledge of the subject. Is there not here a great, a crying need, for education even in the elementary principles of finance and the meaning and significance of business terms? And why should women leave themselves blindly in the hands of a solicitor or anyone else? If out of ignorance, is it not time to get out of this ignorance? If because it is too much trouble to learn to manage their own small affairs, then all I can say is that they must blame themselves, and not their advisers, when loss or disaster ensues.

It is with some misgiving that I approach the subject of the need for business training that exists among that increasingly numerous body—the voluntary workers of London and our large towns. As an accountant and auditor, I am brought much in contact with the members of charitable societies and associations of all kinds. And while yielding to none in my admiration of the enthusiasm, the devotion, and often the self-sacrifice which the voluntary worker brings to her task I should like to suggest that the value of her work might be increased tenfold, and the particular charity rendered

far more effectual and beneficial, if the honorary treasurers and honorary secretaries would, as a preliminary to undertaking such offices, procure for themselves some specific training. A few lessons in book-keeping *might* be thought advantageous to the honorary treasurer, and some prior knowledge of secretarial duties to the honorary secretary.

There is another view of this subject which I would like to put before my hearers, and it is a subject on which I speak feelingly. I can best illustrate it by a personal reminiscence. Some years ago I was a candidate for the post of auditor to a well-known Metropolitan charitable society. The secretary explained to me that, while I should find everything plain sailing and in order at the head office, where there was a regular staff, my difficulties would lie with the branch offices, of which there were over thirty, I think, in London and the suburbs. She stated that I should be required to visit each of these branches once a quarter, that I should probably find the accounts in a considerable muddle, but owing to the fact that the secretaries and treasurers were all honorary, and must on no account be ruffled or offended, my work would require the exercise of infinite tact and unfailing patience. I was young at work in London in those days, and naturally had the idea—of which I am now somewhat disabused—that, at all events where other people's money was involved, the persons responsible for its disposal possessed the necessary knowledge for accurately accounting for it. I, therefore, asked my informant whether she thought any auditor could be found who, for the fixed fee the society offered, would undertake work of a practically unknown quantity, making quite disproportionate demands on her time, and resulting either in desperate overwork, or in

the neglect of her other engagements. And this because of the admitted incompetence of the Society's *voluntary* helpers. The poor *professional* worker was to take the whole burden. She was *paid*, and must therefore not complain, and must spend two hours in setting straight the mistakes of the honorary treasurer, where half an hour should have sufficed for the audit for which she received her fee.

I wonder if I have been unduly severe? If I have, I must beg the forgiveness of any whom my words may have hurt. And my hearers will not, I hope, accuse me of a sweeping indictment against honorary officials. There are numbers who can make the professional look to her laurels, and whose accuracy, order, and method are beyond all praise.

If I have taken as last in order the class of women who are compelled to earn their living and who seek to do so in a business career, it is not because it is the least important; on the contrary, there is no class with which I am more completely in sympathy, or whose interests I have more deeply at heart. And here I do not merely suggest the advisability of a thorough and sufficient training, but I urge it with all the earnestness of which I am capable, as an absolute necessity alike in the case of those who purpose embarking capital in some undertaking, and those who merely aim at salaried employment. Let us first take the case of the woman with a small capital, which it occurs to her to use in setting up a shop or a type-writing office, or a business of some sort. Very frequently it happens that she has no business knowledge or experience whatever; never kept an account in her life, and probably is proud of the fact; knows nothing of how to manage a bank account; while as to even the

most elementary laws of demand and supply, they are an absolutely sealed book to her. But—my readers I hope will be duly impressed—but—she has often made her own dresses, or has a pretty taste in trimming a hat, or her friends have frequently admired her table decorations, therefore she thinks herself especially suited for business and launches into it forthwith.

Then there is the woman who has bought a type-writer and induces her friends to intrust her with some simple MS. which she copies more or less accurately in her leisure moments. It is all so nice and easy that presently she is fired with ardour to set up an office, and announces herself as ready to undertake work of every description; probably takes a partner, who knows as little as she does herself; and their joint and precious capital is embarked, in a most light-hearted fashion, in what I consider to be one of the most fluctuating and uncertain businesses into which a woman can well venture. Personally, I am glad to think I have done something towards preventing the reckless setting up of many such offices, for if there is one branch of work more than another that needs for its successful management a wide and varied knowledge of business generally, the type-writing office is that one. Its accounts alone are of a specially troublesome nature —the documents to be copied deal with every variety and form of business transaction, are often almost undecipherable, invariably full of abbreviations and interlineations, and need the most careful setting out to be ultimately intelligible. Literally, the head of an office needs to know all about everything, and must, besides, possess powers of organisation, a clear head, and an unlimited capacity for hard work.

Wise and prudent advice as to starting a business

has been so often reiterated in the employment columns of many ladies' newspapers that it appears almost superfluous for me to detail here the suggestions that I invariably offer to those who consult me on the subject. I urge them—as others have urged, and often with as little effect—to expend a portion of their capital in thoroughly mastering the technical part of their trade or profession—to start as an apprentice and later on try to secure employment as a subordinate in the same or some similar business or office, whilst losing no opportunity of acquiring a knowledge of finance and of business routine. This plan has a twofold value. First, the obvious one that those who hope one day to command should first learn to obey, and should by their own practical experience have learned to understand the powers and limitations of their subordinates. And secondly, because they thus gain their experience at the cost only of their time, instead of watching with grave anxiety their small capital dwindling away, as might have been their fate if they had tried to start as 'master' instead of 'man.'

It is an easier task to advise and perhaps to help those who aim only at salaried employment. But here, again, many are impatient at the thought of an apprenticeship, forgetting that there is something bordering on dishonesty in undertaking paid work that one is not fairly capable of performing.

Perhaps women have been a little carried away by seeing with what comparative ease others have succeeded in obtaining well-paid appointments. But it must be remembered that the present is woman's opportunity—it is easier at this moment for a capable woman to find work in London than it probably is for her brother to get an opening in the same line, and

certainly easier than it is for the man of lower social standing, who has previously filled many of the posts which now offer themselves to educated ladies. Many reasons have been given for this state of things, but I offer it as suggestive that I have never myself been asked, nor heard of any lady having been asked, for a monetary guarantee of any kind whatever, prior to being intrusted with work of considerable financial responsibility. I believe that a similar assertion could be made by the large body of women now occupying positions of trust in London. But if women are thus trusted—if they work harder, more earnestly and perhaps more conscientiously than men, they must also prove themselves equally competent, if they wish to secure the same rates of payment.

I do not entirely share the view that women-clerks are usually underpaid. There are undoubtedly cases of competent women, with several years' experience, who are standing still as regards their salaries, where a man would, if equally valued, have certainly gone ahead ; but while admitting that there is a point near the top beyond which women do not yet seem to go, I think that in the early stages they are frequently better paid than men, and very often are receiving quite as much as if not more than their work is worth. I know of many cases where after only six months' training and a very few months' experience, at a trifling salary, girls have secured posts at 70*l.* to 80*l.* a year, with prospect of increase, while a brother who has perhaps been two or three years in a bank or business office is getting no more, and in some cases less, although his previous education has been infinitely more expensive.

It is almost impossible for me to bring before my

hearers the weak point in the present system, or rather the present available means of training women for these posts, without some allusion to the classes which with a friend I started a few years ago in connection with our respective offices.[1] During a six months' course, our pupils learn what may be termed the technical part of secretarial and clerkly duties—after that we try to give as many as possible even a temporary practical experience in our offices. So far as the actual results are concerned—that is, as regards the fairly paid and (in some cases) really well paid posts afterwards secured by our pupils—we may consider our classes a success; if, however, I am asked whether I believe that this training is all that is necessary and is thoroughly effectual and sufficient, I say distinctly 'No.' It is the best we can do under the circumstances and apparently is the best most of our pupils can afford to give themselves; because to the very great majority who come to us, it is a difficulty, not perhaps to pay their fees, but to keep themselves during the brief six months of their training. I can assure you that I shrink from the responsibility of encouraging apparently capable girls to come to London to train, when they impress upon me that they *must* have work at the end of the six months as their resources can no longer hold out, while I for my part know they *may* not be fit for it, or that the suitable post may not immediately offer. These are the circumstances under which we carry on our work, and these are the circumstances I want to see changed. Many of these girls have been left with a pittance, and have almost spent it before they think of working. Others, after having lived in comparative luxury, have been left by their parents almost destitute and depen-

[1] See p. 25; also *Facts for Women*.

dent on the kindness of relatives or friends. What else can one do, in the face of such facts, than to try to enable them to earn something—however little—as quickly as possible, and to trust to the kindness of their first employers to excuse the deficiencies of inexperience?

Is it too much to hope that this state of things may gradually change? To hope that the woman who finds herself with a little money, but not enough to live upon, will at once bravely look her future in the face, and arm herself, while it is yet in her power, with a thorough and efficient training—that parents will as a matter of course give their daughters a profession as well as their sons, especially if they have reason to fear they may not be able to provide for them according to their station? I know one will be met with the old argument that the girls may marry and the outlay therefore be wasted. But they may *not* marry—they ought not to have to marry for a livelihood—and if they do marry, might not their training be considered something of a dowry? Are they not likely to make better, more reasonable, and more considerate wives to busy men if they themselves have known that money has to be worked for, and does not drop from the clouds?

When this better state of things comes about, we shall find it possible to revert to the ideal training—the old-fashioned apprenticeship—the training of time and experience. We do not want our pupils to stay longer in a school, but we want them to be in a position to give a year, or more than a year should a special business require it, to gaining practical knowledge and experience, without expecting remuneration. Many openings might be found for them on these terms. The

hard-worked secretary of a society or institution might gladly be permitted to have an unpaid assistant. Numberless busy women, if relieved of some of the mechanical part of their work, would encompass much greater things. And in return for this assistance the junior would learn her work, daily gaining confidence in its performance, and at the end could expect and demand a fitting salary without fear or misgiving.

One word of warning before I bring my remarks to a close. One often finds that those to whom work of any kind is absolutely novel enter into it, when necessity arises, with infinite courage and even enthusiasm. They bend the neck to the yoke unflinchingly and serve their employers with loyalty and devotion. But as time goes on the monotony becomes irksome; they tire of their work, and though not less well done, it begins to be drudgery, and a time of struggle supervenes. One wonders if men go through the same stage: if they do, I suppose they feel it is no use kicking against the pricks, and therefore say nothing about it. If this is so, women might do well to imitate their philosophy.

But I believe the time will come—aye, has perhaps already come—when a woman will think of her work as her *life*—not entered into in a moment of caprice to be left on the first opportunity, not undertaken in a spirit of hungry commercialism, but as the natural outcome of the development of her faculties, to culminate in a career of honourable usefulness. When this is so, will she not re-echo those grand words of Carlyle's, 'Blessed is he who has found his work. Let him ask no other blessing'?

CECIL GRADWELL.

The Education of Women for Business

Miss Janet Hogarth

I am often astonished at the light-hearted way in which outsiders, myself included, undertake to submit their views on given subjects to the consideration of experts. Of course the presumption is usually due to ignorance, the sort of ignorance inseparable from the hurry of this modern life, which drives us to postpone thinking out a subject until the moment when our sins of haste have found us out and our ill-considered promises call loudly for fulfilment. Now this is exactly my own case. When I was asked to state my views on the education of women for business, I had a vague idea that some small personal experience of the actual working of one or two offices might enable me to make a few suggestions not wholly unworthy of the consideration of a conference of educationalists. But when I actually sat down to consider the matter, I found to my dismay that the sort of education required for women in business is precisely the sort of education required for women out of business, indeed for women all the world over. There may be a few trifling differences, but the two are essentially the same. For, let it be said at once, the best education of women for business is simply the best all-round education that it is possible to command.

And this for two reasons. First, because the educated woman puts more mind even into mechanical work; secondly, because she has more resources outside that work to prevent her from wearying of its monotony. Probably no one will deny that a business life is a monotonous one; it is a life therefore, which requires patience, regularity, common sense and self-control. Now

these qualities, which are moral qualities, seem to me, even from a business point of view, so infinitely more important than the qualifications more generally enumerated, such as order, punctuality, neatness and the like, that I am inclined to lay special stress upon the necessity of an education which tends to foster them. In the matter of punctuality and diligence the average girl clerk has the advantage of her male competitor. It may be, of course, that she feels called upon to justify her existence by a superior zeal. But I do not think that this is really the reason. Conscientiousness in little things is a feminine characteristic, and you do not find amongst girls very much of that schoolboy spirit which plays as many pranks as it dares, and feels no responsibility for peccadilloes that are not likely to be found out. I don't say that this spirit is entirely absent, but I do say that with the girl of from eighteen to five and twenty it is the exception, whereas with her brother it would probably be the rule. In neatness she fails somewhat, but of that more hereafter: her real weakness is a weakness which has its physical basis, and which it will need all the resources of her moral nature to combat successfully.

No one who has had much to do with women's work can fail to have been struck by its curious want of uniformity, its unaccountable lapses. Given the necessary stimulus, girls will get through an incredible amount of work and get through it correctly; but the reaction is sure to follow, and you will have a day of extraordinary mistakes that look like unmitigated carelessness. They are not carelessness in the ordinary sense, but they are sins of commission as well as sins of omission, for every woman of sense ought with a little experience to get to know her own off-days, the

days when her accounts will need double checking and when she has her doubts as to the number of r's and l's in 'parallelogram.' Now many occupations permit of a certain degree of relaxation, when head and nerves are not up to the mark; but the woman of business has to reckon with the fact that for eleven months out of the twelve she has to go through her daily routine, and that her lapses are not unlikely to entail a large amount of trouble upon other people. Can this defect in woman's work be entirely avoided? Probably not; it has its physical basis, I should suppose, and though that is a question for medical science rather than for the lay observer, it seems improbable that women's work will ever attain the uniform level of men's. The interval between its highest and lowest points seems to be greater, and its periodic falls towards the lower level on the whole less easy of explanation.

But leaving any comparison between men and women out of account, and turning to the work of women by itself, there can be no question that much remains to be done by the women themselves, and especially by those in whose hands rests the training of girls. It is far too little grasped by the generality of working women that their health is their capital, and that persistent over-exertion is practically living on your principal. Yet a number of girls do this habitually, and then wonder at the diminution in interest which results. Thrift in relation to health is as important as any other kind of thrift, and yet it makes but a small appearance in an education curriculum. The extraordinary ignorance of the commonest laws of health which prevails amongst many women is probably responsible for a large proportion of the cases of nervous weakness which form the despair of anyone responsible

for the efficiency of a staff of girls. And the evil is to a large extent preventible. Teach girls that common sense with regard to their health is a positive duty, and that there is no self-indulgence in a reasonable degree of coddling, and you will have gone far to raise women's work as a whole to a permanently higher level. Next to common sense I would place self-control, more especially in relation to that tendency to rush which is the besetting sin of feminine work. 'Surtout point de zèle' would be an admirable maxim to post up in every woman's office, not because indifference is of value in itself, but because you can assuredly reckon on zeal enough and to spare without making any effort to awaken it. I despair sometimes of making girls understand that there is no sort of merit in record-making, when nobody wants it, and that though the desire to be as good as the best is an admirable incentive to self-help, it becomes the very worst of hindrances when it is daily tending to lower the physical and consequently the mental standard. There is an admirable power of phlegmatic resistance to pressure about a boy, which I would give much to see developed in a girl—a sort of automatic self-adjustment between supply and demand, which keeps energy at a fairly uniform level. It cannot, it seems to me, be too widely understood that the regulations for women's work should all be so framed as to make it impossible for any advantage to accrue from speed; it is not the spur that is wanted, but the curb, for though some few will lag behind and take their ease, the majority will more than make up for these deficiencies.

Common sense, self-control, regularity; these then are the main characteristics which will mark the successful woman of business. She will take as much

care of her health as a successful merchant does of his capital. She will keep in check her tendency to over-exertion, bearing in mind the paramount need of regularity in all routine work, and, so to speak, laying up against those rainy days of all too frequent occurrence, when a little extra control must be exercised over traitorous nerves, if catastrophes are to be averted. I don't say she will have no lapses, for in all but exceptional cases the flesh is weak; but her lapses will be fewer and her power of foreseeing their occurrence greater, and in this, as in so many other cases, preventive measures are the only effective remedy.

Now what sort of education will turn out this type of woman? Obviously it must be a systematic one, and in very few cases is it likely to be a home one. The quickening of wits by intercourse with others, the necessity of being up to time, of keeping to time-tables, and observing certain rules of method and order inseparable from the working of a large school are in themselves an admirable business training. Such schools as the Girls' Public Day Schools turn out admirable material for the more mechanical side of the business world, and if a little more attention were paid to one or two points, probably they would provide all that is needed. I speak with diffidence as to the introduction of lessons of hygiene into an already overburdened curriculum, and prefer to leave this question to educational experts. Possibly enough might be done in this direction by personal influence and example; it has often occurred to me that the very unselfishness displayed by the mistress, in refusing to spare herself, has the effect, which she was far from intending, of making neglect of health seem a virtue in the eyes of her more impressionable pupils. But on one point I

should like to speak with more insistence, and that is the neglect into which the teaching of handwriting has fallen in these latter days. I know that clearness and neatness are aimed at, but what is too frequently forgotten is economy of labour. Girls, and boys too for that matter, are no longer taught to write a clear, round hand with the least possible expenditure of energy; they are not taught to hold their pen properly, to keep the hand in a free uncramped position, and to write from the wrist. Consequently, when they are required to write at great speed for a good many consecutive hours, the muscles are fatigued by unnecessary exertion, and the effect soon shows itself both in the writing and the writer. This is no imaginary danger. Where there is nervous weakness, or any tendency to writer's cramp, no more effective means could be taken to develop this most fatal hindrance to a commercial career than just the way in which the majority of girls are allowed to write.

Could not something be done, say up to the fourth form in High Schools, in the way of definite writing lessons? This would include practically all the girls likely to be intended for business, for the few who entered so late and so far advanced as to be placed at once in higher forms would be too exceptional to call for special treatment. And whilst I am on this subject, may I put in a plea for insistence by arithmetic teachers upon clear and definite figures? It is a small point, but a world of future trouble is avoided by the girl who has learned clearly to indicate the difference between a three and a five, and who has grasped the fact that a seven ought to be something more than a meaningless stroke.

For the lower walks of business, then, the high school system seems tolerably well adapted. I am a

little more doubtful about the higher ones. It turns out girls who are systematic and orderly, but I have yet to learn that it turns out girls who are resourceful. Perhaps this is to ask too much. It may be that life itself is the only teacher of resource, and it is not fair to attribute to a system what is chargeable to human nature. The girl who can think, the girl who is interested in life and in literature, that is the girl who will go furthest, even in the dullest of professions, and who, moreover, will be the least in danger of succumbing to its dullness. And so I return to my original statement, the best education of women for business is simply the best all-round education to be procured. What the high schools need to convert their system into this ideal preparation it is not for me to say; better material to work upon perhaps, fresher minds amongst their teachers, or possibly a simplified curriculum leaving greater scope for outside reading. But here I become so painfully conscious of my own inconsistency—I, the advocate of lessons in hygiene and handwriting—that I must hastily abdicate from the position of critic and take my seat amongst the ranks of the learners.[1]

JANET HOGARTH.

Indexing: A Profession for Women

Miss Nancy Bailey

I have been asked to tell you something about my work—indexing; and more particularly about indexing as a profession for women. In thinking over how I should best say what I have to say in the short space of time set apart for these morning lectures, I have kept in mind a passage in one

[1] In an article in the *Fortnightly Review*, December 1897, entitled 'The Monstrous Regiment of Women,' Miss Hogarth deals with the Business Training of Women at greater length.

of Mr. Chamberlain's speeches, in which he says that he had only one ambition in making a speech, and that was to express in the fewest possible words and with the utmost clearness the views he had upon the subject.

First then, lest I should weary you and lead to no useful result, I have decided to deal as briefly as possible with uninteresting details. Not that the uninteresting details in indexing are few—I warn you at once that indexing, like all work when it is analysed, is nothing but details, and most of them are uninteresting. It is only in *viewing* the finished result that we can delight in it as a whole, and lose sight of the weary hours spent in its accomplishment.

I am often asked how it was that I came to think of indexing as a profession for women—let me tell you how it came about. For some years I had been employed in indexing 'Hansard.' During that time I had many opportunities of discovering the uselessness of the majority of indexes that were published, and at the same time I saw that the need for good indexes was beginning universally to be recognised, and that the difficulty of getting one made by a person who had studied indexing as an art was insuperable. I made inquiries and found that as a rule indexes to books were made by clerks in the publisher's employment, clerks with no experience or training in indexing, and the results were, as may be imagined, deplorable. To meet the need for reliable indexes I determined to open an office. Upon the 'Hansard' contract completing its three years' agreement the work fell into other hands, and I was free to carry out my idea. My office has now been in existence about four years, and during that time I have completed something like 300

indexes. As showing the range and importance of subjects dealt with I may enumerate some of the works I have lately indexed: Nansen's 'Farthest North,' 'Science of International Law,' 'Strand Board of Works Minute Books,' 'Royal Commission on Mining Royalties,' 'Royal Commission on Land in Wales,' 'Royal Commission on Liquor Licensing Laws,' and 856 vols. of 'Hansard,' beginning with the reign of William IV., and continuing down to 1890; this last named important piece of work I may say is in progress. A considerable number of lesser indexes have been dealt with, including 'Pearson's Weekly,' 'The Gentlewoman,' 'The Artist,' and other periodicals, papers, and books.

You all know what an Index is, but have you ever realised what it *should* be? The patient public had grown accustomed to that makeshift thing at the beginning or the end of a book, which they had practically to read through before they could ascertain upon what page of the text they would find the particular passage they wanted. And *then* they might be misled. For instance, there is the well-known case of a book in Ireland, in the index to which appeared the heading 'Snakes in Ireland.' Upon turning to the page of the text to which this referred you found the brief but satisfactory sentence, 'There are *no* snakes in Ireland.'

A properly constructed index always appeals to me as a perfect skeleton of a book; and as an expert naturalist can tell from the skeleton what fur, or hide, or scales, and what talons, or teeth, or wings an extinct animal had, so should an index give an expert reader full insight into the text.

But while the expert reader—the literary person—may see thus far, it is not for that person alone that

an index is prepared. One of the greatest objects to attain in index-making is to facilitate research for the ignorant as well as for the learned. To this end subjects must be broadly grouped under certain main headings where the learned will look for them, and must be cross-referenced in their own alphabetical position for the benefit of the ignorant. The whole world must be borne in mind in constructing an index. I have just said that subjects must be broadly grouped—let me add that the question of subject headings is one of the most *difficult* to deal with; it is one to be observed as far as possible, it is never to be slavishly followed as a fixed rule. As an elementary instance of this let me remind you of that now celebrated index in which appeared as a subject heading 'Mill,' and under it as sub-headings 'John Stuart,' and under that 'on the Floss.' May I ask you to turn with me for a moment to the consideration of the new sphere of work that is opened up by offering to the public reliable indexes at reasonable rates?

'Time is money,' says the proverb, or the copy-book (I can never distinguish between the two, but there is some quality of sense in both). In these days the saying is certainly true and the public knows it, and therefore, having realised that there is great saving of time in having minute books, papers, business transactions, newspaper-cuttings and innumerable other things properly indexed, indexing has become a necessity in works of any importance. And this must grow, since he who has no index loses time, and cannot compete on equal terms with his wiser rivals.

The introduction of a Bill into Parliament was even contemplated to deprive an author of the privilege of copyright, if he published a book without an index.

Only a few weeks back a member of Parliament objected to a National school book in Ireland because it had no index. We live so fast in these days that most people have only time to read the 'Review of Reviews' instead of the reviews themselves; in a year or two most people will have only time to read the index of the 'Review of Reviews.'

I am speaking to you to-day as a practical worker; I am licensed for a limited time to 'talk shop,' as the phrase has it. And I feel I can best give you the possibilities that there are for women in this new sphere of work by giving you some insight into *my* work. During the four years my office has been established I have trained altogether some forty women as indexers, most of whom are at present fully employed in making indexes. Some, of course, have been more successful than others. There is no intellectual woman's work to my knowledge that presents such a clearly defined line between the successful and the partly successful worker as indexing. Let me here explain that indexes may be divided into two classes: (1) Those dealing with what, for indexing purposes, are known as books of opinion, such as 'Science of International Law;' (2) those dealing with facts, such as the 'Strand Board of Works Minute Books.' The books of opinion may be classed as requiring the highest order of indexing ability, and the books dealing with facts as requiring a lesser order of indexing ability. In the indexing of the second class experience, accuracy, common sense are needed; and in the first class all these qualities are necessary and something more, and that is the ability of condensation. After twelve months' training a well-educated and fairly intelligent person, who can keep mind on matter closely, can be trained to index books of facts, but the same

training without the ability of condensation cannot produce an indexer of books of opinion. This is what I meant by the successful and the partly successful indexer. Let me tell you here, as a consoling fact, that my experience is that knowledge of a subject is not, as is generally supposed, absolutely necessary to an indexer. If a person has the qualifications I have mentioned, that person has a power of grasping any ordinary subject to be dealt with in an index. As an example of this I may mention that a few weeks ago I was sent for into the City, and was questioned as to whether I thought it possible for a person, unconnected with the City, to index successfully a financial journal. I brought a copy of that journal with me, indexed it, and sent it in next day. I need hardly say that the subject was altogether new to me, and that the expressions 'bears,' 'bulls,' 'slumps,' and 'booms' had never formed part of any work I had done before, nor of my own vocabulary. But by return of post I received a letter praising my index, not only for its arrangement, but for the knowledge of the subjects dealt with. But an indexer must always be looking for the most important points, and they come to the surface in one thing as well as in another.

A word as to the building up of an index, for it may interest you to hear something of the process. There are three stages in the preparation of an index—compilation, arrangement, and printing. Of these compilation is most important; no arrangement or printing, however good, will make up for bad compilation. Compilation I do on slips of paper, seven inches by two. Upon these slips the entries to be recorded in the index are written—only one entry on each slip. The important word or catchword must stand out in the left-hand

corner, with the necessary qualifying words following it. For instance, say that I am dealing with John Bright and the Cotton Famine, I should first write on one slip in the left-hand corner, 'Bright, John,' and underneath it 'Cotton Famine,' with the page. Then I should take another slip and write 'Cotton Famine,' and underneath it 'Bright, John,' with the page. So you continue till the subject is exhausted, and you have a mountain of written slips. These are now sorted alphabetically according to the all-important catchwords in the left-hand corners. Then the slips under the same letter are classified, and finally pasted on to sheets of paper for the printer. I cannot deal here with cross-references, cross-indexing, and the innumerable technical details which go to make an index useful. I can, indeed, only give you the merest outlines of my method of index-making. The difficulties I make no attempt here to enter into, but that indexing *is* difficult, and that it needs great concentration, patience, and endurance, no one who has any idea of what the work is will gainsay.

In conclusion, let me express the confidence I feel that in the future indexing will supply employment and be the means of livelihood for a very large number of women. I venture to predict that it will become a new profession, and a profession the members of which will be mainly women. For to my mind women are essentially fitted for indexing work. They have patience, endurance, accuracy, conscientiousness. They have, moreover, that extraordinary gift called *intuition*. Men, possibly from centuries of study of mathematics and logic, consciously reason out matters, and after a laborious process arrive at a result, whereas women by their intuition, which is probably an unconscious and quicker

form of reasoning, jump at once to a conclusion which is as correct as the man's, to say the least of it.

I have already pointed out the stores of work that exist for indexers; each day supplies tons of new printed matter, much of which I hope in the future will be indexed. The difficulty to-day is not so much to find the work as the workers, but they will grow in numbers as the demand for them increases.

In my enthusiastic moments I look forward to the days when we have become so strong a profession that we shall unite into a body all competent indexers, hold examinations and grant certificates, and upon the walls of our institute, in those days no more fitting inscription could be placed than these words of Disraeli:

'I for my part venerate the inventor of indexes, and I know not to whom to yield the preference, either to Hippocrates, who was the first great anatomiser of the human body, or to that unknown labourer in literature who first laid open the nerves and arteries of a book.'

NANCY BAILEY.

Women as Factory and Sanitary Inspectors

The Chair was taken by Dr. Wynter Blyth, who reserved his remarks until the papers had been read.

Miss Adelaide Anderson

In addressing the Education section of the Victorian Era Exhibition on the work of the Women's Department to which I have the honour to belong, I should be greatly embarrassed by the magnitude of my subject were it not—may I be pardoned the paradox?—for its very magnitude. Where a field is so vast as this field which has, comparatively so recently, been opened out for a special

application of women's energies, the difficulty in approaching it in a single paper must be not so much through need of condensation or selection of materials as through need for a choice of the standpoint from which the approach is to be made.

It is not always easy to give a good reason for a choice, but I am furnished I think with one here, by the very nature of the circumstances under which I address you. In all the liberal group of subjects bearing on women's activities before this section, there is surely, for this *annus mirabilis*, a tendency to historic survey, to summing up what has been achieved in the times preceding and leading up to the year 1897. In taking account of what has gone before we often gather up threads which lead to a better understanding of the possibilities enfolded in the future; and you can, I trust, readily understand how, from the perception of my own limitations and disqualifications for critical examination of the work in which I bear a part, I lean towards presenting you with some brief account of the circumstances which made the appointment of women as her Majesty's Inspectors of Factories both desirable and possible.

We have, indeed, to deal with so new and special an application of women's capacities that it is almost equally difficult either to fairly estimate the work in the present or to accurately trace the foregoing events which made this opening possible. The moment we attempt, moreover, to take up for consideration some of these foregoing events, we realise that it is not only a woman's question that is to be handled—that we have to further take account of other strong economic and social movements which perhaps arise from different sources, but which are certainly linked with, and

probably destined to carry along with them, special women's movements.

One might perhaps be pardoned for dwelling on that aspect of the subject which links it with the many-sided movement which has run through this era with hardly dreamed-of success in the broadening and deepening of women's lives and sympathies and opportunities for social service. To dwell on that, however, exclusively would, I hold, be to miss the force which finally gave the impulse in this particular instance. If, as the philosopher says, 'thoughts without intuitions are blind,' so abstract ideals without specific needs lack realising force; and however strongly leaders of the women's movement may have urged, as indeed they did from very early days, the desirability of admitting women into all branches of the Civil Service on more or less ideal grounds of justice, the actual course of events yet points to the conclusion that a very strong special need had to be made out before the first appointment of a woman inspector was attainable. As I have suggested, it is no simple task to point with certainty to a train of events still so near to us, and indicate which are the determining ones. The nearer the events the stronger the leaning of personal sympathies in handling them. The safest plan would be to present a compilation of facts and dates, but this would be too long and certainly dull. The more hazardous, if more interesting, method of personal selection on the grounds of an apparently reasonable hypothesis is therefore the one I adopt. The hypothesis is that in treating this question of women's inspection of industrial conditions we are treating a working men's as well as a working women's question. That the leaders among working men felt it to be so is clearly shown by the early debates on the

subject at the Trades Union Congress meetings from 1878 onwards.

The appeal or claim for the appointment of women as factory inspectors has in turn received the sympathy or active support of friends of women's enfranchisement; of economists of various schools; of leading members of the Fabian Society, and of Socialists of every shade of opinion; of reformers of many kinds; and, not least, of trades unionists of the strictest school; but it is most satisfactory to record that the earliest practical efforts to obtain a hearing for this claim came from a working woman, representing working women. Mrs. Paterson, founder of the 'Women's Trades Union League' (in 1874), first moved an amendment to a general resolution on inspection, to secure that women should be appointed factory inspectors, at the Trades Union Congress in 1878, the year of the great consolidating Factory Act. As she pointed out, the experiment had already been tried in France, but in England the Home Secretary had during the previous session refused to receive a deputation of women's trades unions on the subject. In 1879 she was supported by Miss Whyte, Secretary of the Women's Book-binding Union, on the grounds that women could naturally communicate more readily with a woman than a man in authority, and that it was naturally more suitable for women to supervise women. Every year until its object was achieved this claim, either as an amendment to, or as part of, a wider resolution on factory inspection, was brought forward and carried by good majorities at the Trades Union Congress. At first the Parliamentary Committee of the Congress was opposed to the movement, and later on, though no longer opposed to it, was sceptical as to the possibility of this

reform; but ultimately its members took part in deputations to the Home Secretary which pressed for it. In 1890, whether accidentally or otherwise, the resolution before the Congress relating to inspection appears to have omitted special mention of women, and Miss Whyte moved an addition including them which was received with applause. As she pointed out, those she represented only asked that women should be appointed inspectors where women were employed, and they might depend upon it that the women would not let the matter rest until they had got such representation. She certainly thought that one woman at any rate should be tried; 'if the trial failed women would give way entirely.' It should be observed that the aim of these resolutions and of the contemporary discussions in women's trades union meetings was to add to the inspectorate practical working women, conversant in detail with the trades from which the appeal came. At that time I do not find evidence of a desire to secure the appointment of women as women only, on similar terms with the same qualifications and the same power and authority as the existing men inspectors. Certainly it may be taken that the Trades Union Congress in forwarding the movement was far more anxious to add to the inspectorate practical persons with what might be presumed to be special expert knowledge of the conditions under which protected persons were employed, than to press a question of sex qualifications. Miss Whyte took part in the deputation of 1889 to the Home Secretary to press forward this trade union view. It was the doubt then expressed by the Home Secretary (Mr. Matthews), whether under the existing Acts he had power to appoint women as inspectors, which led the Fabian Society to practically declare its sympathy

with the movement by making a special provision [1] for the appointment of women in clause 21 of its draft Amendment Bill for the Factory Acts. This Bill [2] was primarily designed to provide for an eight-hours day, but included various other amendments to the Acts. The aim of this Society on the point in question was no doubt one which stands nearly midway between that of the organised industrial workers on the one hand, and that of the organised and active middle class women on the other hand, who were freer than industrial women workers to press for general social reforms, which should include the opening up of wider opportunities of social usefulness to women as women. The efforts of the Women's Liberal Federation may be taken as illustrating what I mean. While protesting, as Mrs. Paterson, too, had done, against protective legislation which did not include men as well as women, this Federation as a whole claimed that laws primarily intended for the benefit of women should be administered by women. The earliest record I can find of this claim of the Federation is in the agenda paper for the annual general meeting in 1890, where notice is given of a resolution pressing for a wide extension of the Factory Acts, with an increase in the number of inspectors by appointment of women as inspectors for the trades in which large numbers of women are employed. The views of working women themselves were represented, however, at the annual meeting in 1891, in a debate which arose from a resolution (brought forward by Miss Shaw-Lefevre, on behalf of the Marylebone branch of the Federation) pressing for

[1] Shown by the subsequent appointment of women under the general clause 67 of the Act of 1878 to be unnecessary.

[2] Published early in 1890 as a Fabian Tract, No. 9.

appointment of women as inspectors on the same terms and with the same powers and duties as the men. Miss Marland, a weaver from Lancashire, showed that the attitude adopted by Lady Dilke met the desires of the workers she represented. Lady Dilke, who since 1889 had been speaking on this subject at Trades Union League and other meetings, held that the practicable step at that time was the appointment of women as a special class of inspectors who should be engaged on the trades in which women predominated; she urged the present difficulty for women of successfully overtaking the full varied duties of a male inspector. In spite of a certain division of view in the Federation as to the method of initiating the reform, the all-important point was generally urged at this and subsequent meetings that women in factories and workshops suffered grievances and had complaints which they would only willingly communicate to a woman *in authority*. This, and the further consideration that 'it is only where men and women work together that we gain the wisest and truest solution' of social problems, were pressed on the attention of a large body of women of a generally more conservative tendency, in 1892, at the Bristol Conference of Women Workers, by Miss Isabella Ford, of Leeds. Miss Ford, who was President of the Leeds Tailoresses' Union from its foundation, brought home to this Conference a vivid realisation, from her own personal experience, of the evils and abuses that had in the same year been so impressively brought to light by the evidence before the Royal Commission on Labour. In view of the subsequent developments it seems important to record Miss Ford's expression of her conviction that until they obtained women inspectors as well as women overlookers in the

factories 'the moral and sanitary conditions of working women's lives will never be really improved.' The general opinion of this Conference was that it was for women of means and leisure to take steps to promote the desired appointments.

The turning point, however, was the evidence before the Royal Commission on Labour which was appointed and began its investigations in 1891. The evidence affecting this particular question was of two kinds: (*a*) Direct oral evidence given before the Commission sitting at Westminster; (*b*) special evidence gathered throughout the kingdom by the four women Assistant-Commissioners who were appointed early in 1892. As regards the oral evidence, it was represented that in the case of women's labour the Commission was prevented by the nature of its composition and the place of its meeting from obtaining much of the evidence it required, and on February 3, 1892, it was resolved to recommend Miss Orme, Miss Collet, Miss Abraham and Miss Irwin to her Majesty's Secretary of State for appointments as Assistant-Commissioners for the required evidence. These ladies visited all the important centres of industry, taking evidence from workers, employers and other persons, and presented to the Commission early in 1893 a volume of reports on: (*a*) Differences in rate of wages of men and women, (*b*) alleged grievances of women, (*c*) effects of women's employment on their health, morality and the home, and kindred subjects, in connection with all the great industries and a number of minor industries. As these Assistant-Commissioners excluded generally from their reports expressions of opinion as to proposed legislation or its administration, and endeavoured mainly to confine themselves to statement of facts observed, it is not

in their reports that we now find general discussion of the reasons for or against any special reform. Certainly it is from their evidence that the strongest reasons were subsequently gathered in support of the administrative change in question, but it is to the oral evidence before the Commission at Westminster that those who are curious to trace out the *a priori* arguments for and against the appointment of women must turn. The evidence may be summarised as follows. Sixteen of the witnesses were specially cross-examined as to their views on the question of female inspection. Ten of these witnesses were workers, of whom two were women specially concerned to represent the views of working women; all strongly urged the claim and need for inspection by women where women were employed on the two-fold grounds of special fitness (*e.g.* 'women will know where to go and what to look for') and acceptability to the workers concerned (*e.g.* 'the girls cannot talk to men as they can to women'). Two of the men representatives of the textile industry in Yorkshire urged in connection with this claim that mill-life under existing conditions as to sanitary arrangements and organisation of work is 'not conducive to ideas of propriety, gentleness and nobility.' One of the Scottish representatives of the textile industry was 'confident that women are quite as well qualified . . . as the men; women could talk more freely to them.' Views favourable to the appointment of women were expressed by other witnesses. Some, however, urged that the advantages of female inspection were very much over-estimated, and the difficulties that would be introduced into administration not realised. It was held by one of these witnesses that the only factories which women were suited for inspecting were those in

which women *alone* were employed; it will be interesting presently to show that this is the view stereotyped in the French administration of the factory laws. The same witness held that there would be an invincible difficulty in arranging the area for a woman inspector if the increased cost of two-fold inspection were to be avoided. Another held that a woman could not possibly undertake a general charge of factories, could not, for example, go about country districts at night to check illegal employment of protected persons, nor conduct prosecutions in courts of summary jurisdiction. Another, however, stated that he saw no insuperable difficulty in the appointment of intelligent working women 'to be kept at a lower grade and never to be called upon to discharge the duties of the higher office.' Another suggested, as a way of testing the demand for women, the appointment of one woman who should be stationed at the Home Office and work found for her in inspecting millinery establishments in London; and further, where it was considered desirable by her Majesty's Chief Inspector, she should be sent to visit other parts of the country and investigate special cases. He admitted that there was a growing demand for an experiment to be made, which would have to be met, but did not think that 'any good would grow out of it.'

So far as I am aware, the above summarised difficulty of organising the work has never been answered, except in so far as an answer may be found in the existing basis on which the female inspectors' department has been organised. In this, as in so much else in human affairs, we may say, *solvitur in ambulando.* To the difficulty of setting women to detect illegal employment at night in country districts

or disagreeable town districts, it might have been urged that where protected persons—namely, women, boys and girls—were, it was also possible for a woman official to be. Mrs. Paterson said to the Trades Union Congress in 1879: 'If women were obliged to work in such places, it could not be unfit for women to visit them; . . . even if it were proposed to appoint women of the richer classes as inspectors, such women could not be at all the worse for seeing the places in which other women had to work.'

To the other more formidable difficulty, as to public prosecutions, where the ground was much less certain, no counter argument could have any value beside the simple fact that the women inspectors have been able in practice to meet the difficulty with success. (See Appendix.)

At the beginning of 1893, it was known that the experiment was to be made. At a meeting of the National Liberal Federation on January 2nd at Liverpool, the Home Secretary, Mr. Asquith, dealt with administration of the factory laws, and referred to his hope of doing something to meet the desires of women for female inspection. In the previous year, November or December 1892, an unsuccessful attempt had been made to send a deputation of women to Mr. Asquith on this subject, but on January 24, 1893, he received simultaneously four deputations: (*a*) From the Women's Liberal Federation, (*b*) from the Women's Trades Union League, (*c*) from the Women's Trades Union Association, (*d*) a body of trade unionists (men) introduced by Mr. Fenwick, M.P. On the outcome—namely, the appointment of two women as factory inspectors centred in London and Glasgow respectively—many resolutions were passed by women's organisations,

trade, social, and political, in the course of the same year throughout the kingdom. The general sense was that, while grateful for the step that had been taken, women hoped for further developments. Not all the demands were, however, so large as that of the Women's Emancipation Union, which in the Conference room of the House of Commons urged through a representative that the numbers should be increased a hundred-fold.

Two more women were appointed by the same Government in the following year, May and June 1894, and a fifth was added to the staff by the present Government in the end of 1895. The work of this department was at first carried on under the immediate supervision of her Majesty's Chief Inspector of Factories. In time it was organised under the superintendence of the senior inspector, Miss Abraham (now Mrs. H. J. Tennant), who was promoted in 1896 after three years' service to the rank of H.M. Superintending Inspector by Sir Matthew White Ridley. Her we have too soon lost. It is only too true that the loss is in a sense irreparable, but we trust her initiative may be carried on in the work that follows after her. Among the remaining women inspectors are two who received their training as sanitary inspectors under the Public Health Acts, and two who spent some years in special investigation of industrial conditions, one having been on the office staff of the Royal Commission on Labour, a staff largely consisting of women clerks drawn from the women's colleges at the Universities of Oxford and Cambridge.

As I have indicated previously, the appointments of women inspectors were effected in the ordinary

way under section 67 of the Act of 1878,[1] and the determination of their duties and powers was strictly according to precedent. The general administration of the Acts by the male inspectors is partly on a basis of districts, partly on a basis of special functions, and in both cases the work of the officials is organised under a superintending inspector. Five superintending inspectors supervise the general administration of the Acts by district inspectors, aided by juniors and assistants in forty-one districts. Three officials (one a superintending inspector) supervise the special administration of the Cotton Cloth Factories Acts, and another group of inspectors administer the highly technical sections relating to particulars of work and wages supplied to piece workers in the textile industries. The women inspectors belong to the class of special inspectors appointed to special duties independent of the basis of districts, although their work carries them into every district, and every species of factory or workshop where protected persons are to be found. Although largely engaged in special inquiries and in attending to special complaints of workwomen, they are empowered to deal with infringements of the Acts they detect by the way. Their reports have been published, every year since their first appointment, in the annual report of the Chief Inspector of Factories; and it is from these reports that the details of their work can be drawn. If the reviews and comments of representatives of working men and women to which I will refer presently are further taken into account, it would appear that a real

[1] By nomination of the Home Secretary and subsequent examination by the Civil Service Commissioners. If the candidate passes the examination she receives her warrant of appointment from the Home Secretary.

advance has been made, which harmonises with the desires and expectations of those who pressed for the change.

In the earlier stages of the movement, so many references were made in England to the experience already gained in France that it seems desirable to make some comparison between the systems. Women were employed in France as inspectors for the department of the Seine soon after the Law of 1874 came into operation. When this Law was superseded by that of 1892 (a Law described by M. Laporte, inspector for the department of the Seine, as being 'more in harmony with the legitimate aspirations of working women') the system was recognised throughout the country, and women inspectors were established in various important centres where a large number of women were employed in workshops. They are now to be found at Lille, Nantes, Bordeaux, Marseilles, and Lyons. A decree of December 13, 1892, organised the general system of inspection, creating five classes of district inspectors, male and female (*inspecteurs et inspectrices départementaux*), receiving salaries ranging from 3,000 francs to 5,000 francs, and three classes of superintending inspectors, male only (*inspecteurs divisionnaires*), with salaries ranging from 6,000 to 8,000 francs. Circular instructions of the Minister of Commerce and Industry laid down at the same time the principles hitherto sanctioned by practice on which the work of the men and women district inspectors should be divided in the following terms: 'The male inspectors are specially charged with supervision of factories and workshops where the workers are exclusively men, or where men and women are both employed. They are also to visit all work-places employing only

women where machinery is moved by mechanical power. The female inspectors (*inspectrices*) are charged with the supervision of workshops employing only women working without aid of mechanical power. In districts where no female inspector has been appointed, all work-places will be inspected by the male inspector.' The same instructions empower both male and female inspectors to take proceedings, with the approval of the superintending inspector, for infringements of the law.

The above-indicated subdivision of work between the men and women was further insisted on last year in a Ministerial letter on the administration of the Law of 1893 relating to sanitation and safety in industrial establishments. 'The questions raised by this Law being purely of a technical order, it concerns only the men inspectors to deal with them.'

In France, therefore, where women have been so long nominally employed in industrial inspection, it seems that it has been only in a subordinate capacity and in such a manner as to avoid solution of the special difficulties which were later raised and met in England. It is clearly held in England, as it is in America and the British Colonies,[1] that many of the most serious problems affecting women's employment, which stand in greatest need of investigation by women, arise in precisely those work-places from which the French women officials are expressly excluded—namely, in 'factories'—where by the English definition machinery is moved by mechanical power—employing men, women and children alike. If a narrower view had prevailed in England, much of the most important work of

[1] Women inspectors were first appointed in Australia in the same year as in England.

investigation and administration effected by the female inspectors' department in the last four years would have been excluded, more particularly their inquiries into dangerous or unhealthy processes and the ordinary sanitary conditions of all varieties of industries, matters involving the health and well-being of many thousands of women, young persons and children. There is another aspect in which the French system may be contrasted with the English, an aspect which was indirectly illustrated in a most interesting way by M. Bouquet before the Milan International Congress on Industrial Accidents in 1894, when he gave his address on the reorganisation of factory inspection in France. One sees in the system, he said, 'that the preoccupation of the French Government was to establish not a retreat for incompetent workers (*déclassés de l'industrie*), but a career into which the inspectors might enter in the plenitude of their strength and activity, finding in it by gradual promotion a recompense for zeal and the satisfaction of a legitimate ambition.'[1] This claim applies in no sense to the organisation of the women's work. Of them M. Bouquet merely remarks that 'the experiment of employing them has been favourable. It has been demonstrated that a woman can render real services if her action is limited to work-places where none but women are employed and where there is no need of technical knowledge.'[2] France has thus not yet attempted the experiment of opening to women a career which might attract persons of higher special ability and training—an experiment which, setting aside England for the moment, has been so happily made in Illinois and

[1] *Bulletin de l'Inspection du Travail*, 1895, No. 2, p. 102.
[2] *Ibid.*

other of the United States of America. To the women inspectors of France, moreover, is denied the public expression in the annual reports of their official experience and the opinions they form in the course of it, experience and opinions which it must surely be of moment to the industrial world to learn.' We occasionally read in the French inspectors' reports of work done by the women inspectors, never do we read in their own words the views and suggestions the women have to offer.

Turning to the experience of the English women inspectors: where the material presented by their reports is so considerable it is difficult to present in part of a single paper a conception of the scope of the work included. A few figures will help to indicate our starting point. The total number of registered workplaces to be inspected by the whole of the staff of the Factory Department appeared from the annual report in 1896 to be 184,226, of which 79,000 were factories and the remainder workshops; these figures are exclusive of outworkers and domestic workshops which come within the scope of the Acts for certain purposes. A very large proportion of these contain 'protected persons,' of whom women and girls specially appeal to the care of the women inspectors. A short calculation shows that it would take them many years to visit, even once, such places, and that no general responsibility for their condition can be undertaken by the four women inspectors. Their work therefore is of a special kind, directed to special aspects of the law, to dealing with special grievances and complaints as they arise and as time and occasion permit. Some further figures indicate the actual work. In 1895 they visited 2,358 factories, of which more than one-third were found to

have sanitary defects, and 4,599 workshops, of which 283 were formally notified to the local sanitary authorities. These visits were exclusive of 4,500 visits to laundries and workers in their own homes and various persons connected with local administration. Further they took proceedings against employers in the courts of summary jurisdiction on account of 128 infringements of the Acts, conducting their own cases and securing 125 convictions. As one result of her varied experience in the latter capacity Mrs. Tennant published last year a guide to the Factory Acts, in collaboration with Mr. Llewelyn Davies, which aims at presenting the whole of the law in a coherent, clear, and accurate form. As I have now been daily testing it for more than a year in practical administration, I can confidently assure you that it is really what it aimed to be.

The list of special reports on aspects of women's and children's labour which we had presented to the Factory Department by the beginning of 1896 was already fairly formidable. It included reports on conditions in laundries; on general sanitary conditions in textile factories; on unhealthy or injurious processes, such as rag-sorting, vulcanising of indiarubber, fur-pulling, use of chromate of lead, and many others; on home-work; on fines and deductions; on employment of women in the fish-curing industry; I have myself also prepared long summaries on factory legislation in France, Germany, and other countries.

During 1895, as you may see from our joint report, published for that year, nearly half of the very varied complaints forwarded by working women or their friends to the women inspectors' department related to defects of different kinds in the sanitary arrangements.

At the end of two years' work in dealing with these, we presented what not a few people have been inclined to consider a rather pessimistic account of the situation. Something, no doubt, may be allowed for us in the magnitude of the task that was opening up before us, in the early days of experience of the delays caused by the dual system of control in these matters by the Public Health Acts and the Factory Acts, a system which makes it somewhat difficult to bring the sanctions promptly to bear upon obstinate cases. I do not think, however, we have at any time lost sight of the fact that a large part of our work in this sphere was bound to be for a very long time educational; and while anxious that the truth of the case should be widely known, we have also felt the necessity for moving slowly and patiently in all but the very worst instances. Our report shows that during 1895 we drew the attention of the local sanitary authorities to defects requiring action in 425 instances. This by no means represents the actual number of defects found—only those in which we were assured that no preliminary conference with the occupier could be of any use. In only eight cases altogether until the present time have we taken proceedings before the magistrates for persistent refusal to make necessary structural alterations, and most of these were cases where the sanitary authority after repeated requests took no action. In every case of this kind we have obtained the necessary order from the magistrate, or a conviction leading to the required result. You will find on page 110 of Report, 1895, some remarks of mine illustrating the kind of difficulty we encounter. In important 'Lancashire towns I have found sanitary officers handicapped by the slowness of the local authority to apply com-

pulsory measures. In one town on revisiting a factory . . . the manager informed me that the whole sanitary council, on my notice, had visited the mill—as he said, two cabs full of them, including the ex-mayor and several aldermen—and that they had then taken no further action.' Such ludicrous delays have occurred even after the Amendment Act of 1895 brought into force regulations making the links between us and the local authority closer; but there is no doubt that some advance has been made, and much may be hoped for, in time, from unremitting and ever-extending efforts.

If there have been difficulties arising through dual control of one branch of factory sanitation, another kind of difficulty has greatly taxed us in dealing with the vexed question of ventilation. This is dealt with under the Factory Acts alone, but on the one hand the whole subject of what constitutes ventilation is in a more or less unsettled condition, and on the other, whatever ventilation may mean, it can only be enforced in order to render harmless, so far as is practicable, all gases, vapours, dust or other impurities generated in the course of manufacturing processes. The recommendations of Mr. Osborne, H.M. Superintending Inspector of Factories, for a fixed standard of purity in air still remains our unattained ideal. The comparatively new requirement as to *reasonable temperature* in a work-place presents really far less difficulty in itself, although often the two together complicate each other, as in the not infrequent cases where gas jets have hitherto served the double purpose of lighting and heating apparatus; we have in this direction been able to effect many improvements.

Perhaps in some ways the most absorbing and effective branch of our activities is to be found in the

repression of illegal overtime—made illegal, we are most thankful to record, since we began our work, for young persons under eighteen, and reduced in amount for women; the tracking down of old offenders in this leads to some of the not least entertaining of our experiences. A greater tax on our ingenuity appears in the prohibition of employment outside the factory or workshop at the end of the legal day. Where giving out work with this end has been hitherto an organised practice, as particularly in certain branches of the clothing trades, immense difficulties arise in securing conclusive evidence of the employment of women and young persons both before and after the dinner hour, an essential point in the law at present.

The enforcement of the regulations for the special protection of children and young persons who form so important a proportion of protected workers has occupied, as the joint report shows, a large share of our attention. As Miss Deane writes :—'In view of the fact that the future physical and moral development of the industrial population depends largely upon the conditions under which this section of it works while at the most critical and impressionable age, it is evidently impossible to overrate the importance of every measure which tends to produce wholesome or beneficial conditions. A great deal still remains to be desired in the matter of the supervision of half-timers and young persons and the conditions under which they work.' Striking instances were given showing that the 'subject is one to which employers might devote considerably more attention.' It is also shown that there is frequent occasion to observe the laxity of employers in obtaining certificates of physical fitness of children for employment, and in several cases 'we

have obtained convictions for employment of young persons after certificates had been refused by certifying surgeons.' Miss Paterson refers to complaints of the effect of factory surroundings on children, the abusive and profane language of which they hear so much, and the driving to which they have to submit. 'In many factories the half-time workers are the victims of numerous tyrants, and what appears to be required to remedy this is the appointment of a woman in each factory whose . . . duty it would be to protect and overlook the half-timers.'

Before concluding, I should be glad to make some attempt in a summary way to indicate the view I have gathered from the material afforded by the published reports of my colleagues in this country, and the reports direct and indirect of our fellow-workers in other countries, of the main scope of the work attempted by women as inspectors of factories wherever they are. Out of all the multitudinous details of their work one leading idea appears to me to have precedence, although I speak with diffidence. The idea so frequently anticipated in the early history of the movement appears to predominate, both here and in the one other country where women have a recognised initiative in this work, viz. in America. If we were to try to describe it in a single expression, we might suggest that the idea before women has been specially that of a higher sanitation in industrial life; a sanitation which is to include not only physical but moral elements, perhaps foreshadowing a time when the implicit ideal of the Factory Acts may become explicit, and consciously adopted—I mean the ideal that no industrial community is in a right or prosperous path which permits the subordination of the worker to the

sole end of production, which neglects to provide for the main elements of dignity and propriety as well as physical health in the life of the individual worker. This is to look far ahead, however, and the flight may seem hardly justified by the sober details of all the reports, with their records of routine visits to innumerable towns, districts, villages; of special inquiries into unhealthy or dangerous trades; of dealings with local authorities; of studies of special features of women's work and child labour; of prosecutions on account of illegal employment in the courts of summary jurisdiction. It is indeed interesting to read of the French women inspectors (what we are not permitted to gather from their own account of their work), the words of one of their superintendents, M. Blaise, in 1896: 'The *Inspectrice* (at Rouen) has done her work with the greatest accuracy and a zeal which it is equally important to recognise, enforcing sanitary regulations in small workshops never before visited, and securing respect for legislative control of labour.'

It is surely not a mere coincidence that an unprecedented growth of general public interest in administration of the Factory Acts should have set in here in England when the first appointments of women to aid in the work were being made? Does it not mark a new turning point, leading us away from one disastrous result of the 'Industrial Revolution' which practically swept away the great household industries, thereby depriving women of the natural control of their own industrial activities, and consequently of the power to determine as individuals the surroundings in which their daily work was carried on? I need only refer you to the history as told in blue-books of the early struggles on their behalf to meet the terrible effects upon

women and children by new principles embodied in legislation (principles the full bearing of which are only beginning to come into view), in this great body of laws which I indeed hold to be the first great charter of their liberties under the conditions of modern industry, and the basis doubtless for far wider extensions. It is impossible for me even in my own thought to make any forecast for the future of our work, as yet. One thing only is becoming clear to me—that a step has been taken, in the formation of our department, which has afforded the first real and living link between industrial working women and the governing bodies of this country. It is helpful to reflect that in the course of the debate last year in the House of Commons on factory administration, it was acknowledged in turn by each speaker that female inspection was an essential part of factory administration. Both Mr. Asquith and Sir Charles Dilke were agreed that some parts of the law could only be efficiently enforced by female inspection. Sir Matthew White Ridley is reported in the 'Times' as affirming that 'the inclusion of laundries within the operations of the Factory Acts had made it specially desirable to add to the staff of lady inspectors, and he was taking steps in that direction. Much good had been done in the interest of the female workers of the country by the appointment of those lady inspectors.'[1]

Turning to the views of workers themselves, we read in the organ of the Lancashire textile workers of December 4th as follows: 'Inspection has been a blessing to the textile workers, and will be so to the women and children employed in workships. With a view to making inspection work more efficient amongst the

[1] See *Times*, August 1, 1896.

female workers, a number of inspectors have been appointed from their own sex, and these have done good work in obtaining the rectification of trade abuses which were detrimental to the health and general welfare of the female workers. . . . . That the future will see an increase in the number of female inspectors may be taken for granted.' [1]

'A 'Mill-girl,' writing on 'Women as Inspectors' to the 'Yorkshire Factory Times,' says that mill-girls 'need a sensible and educated woman to further their cause. . . How many of our women there are that have to spend most of their lives . . . in unsanitary workshops or mills, not daring to complain, and even if they have courage they shrink from telling a man. . . . It is hoped that in the near future the seed sown may spring up and bear fruit a hundred-fold, and that the improvement in the conditions of factory life will lead to a higher standard of morality, and consequently take away the stigma that is often attached to mill-girls as a class.' [2] The president of the Leeds Tailoresses' Union recently wrote: 'The amount of help the women inspectors have given women by their reports and work is enormous.' [3]

At their annual meeting, one of the largest organisations of women workers, the Women's Co-operative Guild, in 1896 passed a resolution referring to the work of the women factory inspectors, and urging that the number of women inspectors should be largely increased. They have also dealt with the subject in 1897.

[1] *Lancashire Cotton Factory Times*, December 4, 1896.

[2] *Yorkshire Factory Times*, September 11, 1896.

[3] *Women as Factory Inspectors and Certifying Surgeons* (Pamphlet for the Women's Co-operative Guild, 1896), p. 6.

As these are representative views it seems unnecessary to further illustrate the present feeling of the workers as to the effect of the institution for which they themselves first urged a claim.

ADELAIDE M. ANDERSON.

APPENDIX. SHOWING PROSECUTIONS BY WOMEN INSPECTORS DURING 1895

Class of Offence	Nature of Offence	Proceedings	Convictions
Administration .	1. Failure to keep register of young persons and children in factory	3	3
	2. Failure to affix abstract	15	15
	3. Failure to register, report, and affix particulars of overtime	32	32
	4. Failure to fix period of employment within prescribed limits and allow one hour for meals before 3 P.M.	2	1
	5. Failure to keep prescribed list of out-workers	1	1
	6. Obstruction of H.M. Inspector	1	1
Sanitation and safety . .	7. Failure to limewash factory	10	10
	8. Failure to keep factory free from effluvia arising from insanitary privies	2	2
	9. Overcrowding during overtime	1	1
	10. Allowing child to clean machinery in motion	2	2
	11. Failure to fence a hoist	1	1
Illegal employment of protected persons . . .	12. Employment of women and young persons during meal hour	3	3
	13. Employment of women and young persons for more than five hours continuously without an interval for a meal	1	1
	14. Illegal employment of women at night (after 10 P.M.)	5	5
	15. Employment of women before commencement or after close of legally fixed period	9	8

Class of Offence	Nature of Offence	Proceedings	Convictions
	16. Employment of women and young persons after legal limit on half-holiday	11	10
	17. Employment of women and young persons on statutory holidays	1	1
	18. Employment of women overtime without giving extra half-hour for a meal	2	2
	19. Employment of young persons or children without certificate of fitness	23 [1]	23
	20. Employing child full-time	3	3
	Total	128	125

[1] This figure shows number of persons prosecuted, not the number of protected persons illegally employed, which would be much larger.

Miss Jessie Gray

One of the latest developments of women's work, in this age of change and progress, has been the appointment of women as sanitary inspectors. So far as can be judged from the results of five years' experience, these appointments have not brought discredit upon the cause of women workers, but on the contrary have proved that they are capable of filling public positions of trust most satisfactorily.

Recognising fully the truth that 'woman is not undevelopt man, but diverse,' it is to be hoped that the time will come when no sanitary authority will consider its staff complete without the services of a woman inspector. Of the many duties devolving on such authorities, there are some which women can perform, not only as well as men, but which they can perform much better.

The first impetus to the appointment of women sanitary inspectors was the passing of the Factory and Workshop Act of 1891, which made local

authorities responsible for the sanitary condition of the workshops in their districts; since 1871 these had been under the supervision of her Majesty's Inspectors of Factories only. In some districts in order to overtake the duties entailed by this Act special inspectors have been appointed, most of them being women.

The first local authority to take the bold step of appointing a woman was the Corporation of Nottingham, which in May 1892 appointed Miss Hawkesley as 'workroom inspector.' This example was followed by Kensington and Manchester in the autumn of 1893, two workroom inspectors being appointed in each district. Since then other appointments have been made, by the local authorities of Islington, St. Pancras, Southwark, St. Helen's, Brighton, Leicester, Glasgow, Liverpool and Leeds. There are now eighteen women at work under the health committees in these districts.

A new departure was made when, on April 10, 1895, the Kensington Vestry raised their senior inspector, Miss Squire, to the status, and vested her with the full power of, a 'sanitary' inspector, and on the 26th of the same month I was appointed in the same way by the Islington Vestry. St. Pancras and Southwark have made similar appointments. These are the only districts where women are regularly appointed sanitary inspectors. The difference between the powers of a sanitary and of a workroom inspector is that local authorities in the Metropolis, according to the wording of the Public Health Act, cannot lawfully enforce sanitary alterations except on the certificate of a medical officer of health or a sanitary inspector, so that any defects reported by a workroom inspector must be certified by a medical officer of health or a

sanitary inspector before any legal steps can be taken to remedy matters.

All appointments as sanitary inspectors must be sanctioned by the Local Government Board; all persons appointed must hold the certificate of an examining body approved by the Board.

At present the certificate required is that of the Sanitary Institute. Provincial appointments are made somewhat differently—those of the chief male inspectors only requiring the sanction of the Local Government Board.

The examinations of the Sanitary Institute are held twice a year in London and in other centres.

The subjects are varied, including sanitary law, house construction, water supply, drainage, details of plumbers' work, heating and ventilation, infectious diseases, disinfection, diseases of animals in relation to meat supply, &c. &c.

The examinations are preceded by courses of lectures, lasting about two months. The lectures are supplemented by visits to places interesting from a sanitary point of view. When the Islington appointment was made in 1895 there were only twenty-nine women who held the certificate of the Sanitary Institute, there are now seventy-four.

In addition to this certificate, most of the women inspectors hold certificates in hygiene from some other examining body—several are diplomées of the National Health Society.[1] This society gives lectures in hygiene, sanitation, and other health subjects, and was a pioneer in women's hygienic education. The certificate of the National Health Society was held by Miss Squire

[1] *Facts for Women.*

and Miss Deane when they were first appointed workroom inspectors at Kensington.

The work of a sanitary inspector is carried on under the direction of the medical officer of health of the district; all books and reports are periodically submitted to the inspection of the health committee of the local authority. The duties of women inspectors vary in the different districts, but most are engaged in inspecting the sanitary condition of workshops and laundries where females are employed.

Generally speaking, a 'workshop' may be defined as a place where articles are manufactured for sale, without the aid of mechanical power; thus it is evident that in every district there must be numbers of workshops. In Islington, in addition to the ordinary dressmaking and laundry work, there is a great deal of work, such as tie-making, blouse-making, mantle-making, &c., done in workshops for the wholesale City warehouses.

In visiting a workshop for the first time, the inspector measures each room used as a workroom (to see that the regulation 250 cubic feet of space is allowed for each worker), notes the provision for ventilation and heating, the condition and cleanliness of walls, ceilings and floors, and the state of the water cistern, dustbin, &c., and examines the condition of the sanitary conveniences for the use of the employées. In the workrooms a woman inspector hears of many troubles and difficulties which would never be told to a man, so she can do much to add to the health and comfort of the workers.

A register of workshops is kept in each district, and they are inspected systematically twice or thrice a year, more frequent visits being paid to any that have

been found to be overcrowded or badly ventilated. The latter is one of the greatest difficulties with which inspectors have to contend—as a desire for fresh air is the exception, not the rule, with workroom employées.

Visits are also paid in some districts to the houses of female out-workers.

In Southwark, the work lies principally in inspecting tenement houses—as to cleanliness, over-crowding and general sanitary condition. In Manchester, besides the supervision of workshops, the inspectors have to see to the carrying out of the Shop Hours Act. In St. Helen's, Brighton, and Glasgow, the inspectors work among the poor, trying to inculcate the importance of cleanly habits—visiting especially cases of measles, infantine diarrhœa, &c.

If any sanitary defects, or 'nuisances' as they are called, are found to exist on premises inspected, the inspector reports to the medical officer of health, and a notice is served on the owner or occupier requiring the abatement of the nuisance within a certain time; should the work not be carried out, the matter is put before the health committee, and if they sanction the step a 'statutory' notice is served; if this is not complied with, a summons is taken out, and the case goes before the magistrate. Fortunately this is of rare occurrence with the notices of women inspectors. I have never had to proceed to such extremities, finding that most people are law abiding, particularly if they are not rubbed the wrong way!

As regards the abatement of nuisances, women inspectors only supervise such work as whitewashing, the provision of additional ventilation, the repairing of floors, roofs, dustbins, cisterns, &c., and leave the

supervision of drainage and construction work to the male inspectors.

The hours worked per day by inspectors are different in each district, the average being about six and a half hours on ordinary days and four hours on Saturdays.

Most inspectors go to their office in the town or vestry hall at 9 or 9.30, to do office work and receive instructions, letters, &c. The office work consists of writing in a diary an account of the work of the previous day, keeping the register up to date, making weekly and monthly reports, making out notices, and workroom cards (for distribution in the workrooms *re* cubic space).

After the office work is done, inspection begins and is continued with an interval in the middle of the day till 4.30 or 5 P.M. The evenings are free except for an occasional committee meeting when the inspectors must be in attendance.

The great drawback to the work is the short holiday —a fortnight in the year and Bank holidays being the regular allowance. I am sure that an extra week or so in August (a slack time in almost every trade, when the workrooms are nearly empty) would do no one any harm and the inspectors a great deal of good. As a matter of fact, however, in most cases the fortnight is somewhat elastic, and does not always consist of fourteen days only!

The salaries given at first were very low, the Kensington Vestry paying their first inspectors at the rate of 60*l.* a year—a very inadequate salary considering the work expected of them.

In the provinces the rate of payment varies from 65*l.* to 92*l.* a year, with uniform.

In London the salaries are higher as a rule. The Southwark Vestry gives a commencing salary of 110*l.*, rising to 150*l.*, with 5*l.* for uniform; this is the only case in which a woman inspector is paid at the same rate as the men. The Islington Vestry gives a commencing salary of 100*l.*, rising by 10*l.* a year to 150*l.* Kensington now gives 100*l.* a year. The St. Pancras Vestry gives 20*l.*, rising by 5*l.* to 100*l.* a year.

It is to be hoped that women inspectors will not come to be regarded as 'cheap men.' If a woman is appointed for certain work for which she is considered better suited than a man, it seems absurd to offer the more suitable person only one-half or two-thirds of the salary that would be given to the less suitable.

The general impression of outsiders is that sanitary inspecting must be disagreeable work and everything connected with it must be disagreeable also, and above all that the woman sanitary inspector is the worst type of 'New Woman.'

That last idea I shall not try to combat.

As regards the work, there are of course disagreeables, but these occur principally at the early stages, when at every visit the *pros* and *cons* of such an appointment are freely discussed and one is reproached for taking the bread out of the men's mouths and other enormities of a like nature!

Then there are the people who resent the visit as an intrusion and say that they have never been accustomed to have anyone poke about their place in such a way, &c.; but these, and more serious difficulties, are soon overcome by any woman with tact, and in subsequent visits one is met in a friendly spirit, inspection having lost much of its terror; only in a few cases is she looked upon in the light of an enemy.

There is no doubt that there is a great field for women in enforcing sanitary law, if local authorities would only recognise the fact. It may be mentioned that in the Minority Report of the Labour Commission the signatories expressed an opinion that local authorities might advantageously be urged by the Local Government Board to follow the example of the Kensington Vestry in appointing women sanitary inspectors. It is to be hoped that this good advice will be acted upon, and that women inspectors will be appointed throughout the length and breadth of the land.

JESSIE GRAY.

Dr. Wynter Blyth

The Chairman considered that it would be very desirable in the future if factory inspectors first served a short novitiate as sanitary inspectors in big towns. He complimented Miss Anderson on her admirable historical summary of the movement, which had originated from below and not from above. With regard to the Factory Acts, to which Miss Anderson had incidentally alluded, Dr. Blyth regarded them as so inconsistent that it would be better to have them repealed, and a new code drawn up, more in consonance with the principles of hygiene. To illustrate this the Chairman pointed out the impossible way in which the Act legislated the matter of ventilation in factories and workshops. The dual control was another great element of weakness. Dr. Blyth hoped the time would come when the Factory Acts would be administered by the local authorities, and the Home Office only exercise a general supervision. With regard to sanitary inspectors, the Chairman considered that Miss Gray's paper gave a fair and accurate account of the work carried out by the Islington Vestry. There

was room, and even necessity, for more women to be employed in this capacity, especially in inspecting the vast number of workshops (drapers', milliners', and others) in and around Oxford and Regent Streets, which were in his district, and of which he could speak from personal experience.

After a very brief discussion, votes of thanks were passed to the speakers and the Chairman.

III

EDUCATION IN INDIA AND THE COLONIES: UNIVERSITY EXTENSION

Education in India

The Chair was taken by Lord Hobhouse, K.C.S.I.

THE Chairman confined his remarks to the broad outlines of general education in India—not exclusively women's education—on the principle that the considerations which govern our policy for both sexes are generally alike. Lord Hobhouse deemed it most necessary that *constant* attention should be paid to the subject of education in India by the people in England. The whole policy had been set on foot under pressure of public opinion in England, and it had then been determined that an attempt should be made to carry to the Indian mind the wider knowledge and more exact habits of thought that had prevailed for three or four centuries in Western Europe, and that had resulted in making the nations of Western Europe stronger and more advanced than the other nations of the world. The experiment might be looked upon as a success, if its acceptance by the Indian people could be regarded as a test; it was the one European institution into which they had thrown themselves heart and soul.

Lord Hobhouse, K.C.S.I.

During the Chairman's last year in India as Vice-Chancellor of the University of Calcutta, the first

female student had been admitted to his University. Since then an increasing number of girls had received English education in the schools, and an increasing number of young men and women had come over to England to obtain the best education they could get. As to what would be the result of this great stimulus when applied to the subtle and acute Indian intellect, Lord Hobhouse could only throw out suggested possibilities. He thought it could hardly fail to alter the views of the institution of India upon which society mainly rests—the institution of caste. He admitted the deepest respect for this system, which on a small scale (that of the family or of the village), proved itself the very cement of Hindoo society, but on a large scale created artificial barriers by which national life was rendered almost if not quite impossible.

It was of course out of the question to suppose that a system so powerful and so ancient should suddenly or rapidly be dissolved—in fact, frightful social convulsions would result if such an impossibility could occur; but perhaps by degrees, and in the years to come, a higher and nobler principle, possibly a more spiritual religion, or wider views of human law, or a more profound acquaintance with natural laws or the growth of a national spirit, might supersede the system of caste and yet provide supports for society as firm, and bonds to knit it together as strong, which should admit of free growth from weaker to stronger. Though far off, this change is inevitable, and the best preparation for it is that we shall have a large number of men and women whose minds have been stored with sound knowledge and trained to accurate habits of thought. There are thinkers who say that there is great political danger in all this, that we are forging a weapon which may be

turned against ourselves. Now this fact was looked at fearlessly and disregarded by the statesmen who determined to do what in them lay to promote this policy of education. They gave their reasons for thinking that an intelligent people was a less dangerous thing to deal with than an ignorant people, and over and above that, they held it was our duty to give to the people over whom we had assumed the dominion the best thing we had to give, in the faith that moral and spiritual influences would work for good, although we might not be able to forecast the exact mode in which they would work. That policy was set on foot forty or fifty years ago, and the result has been amply justified.

Mr. H. M. Birdwood then read his paper on 'The Higher Education of Women in India.'

Mr. H. M. Birdwood, C.S.I.

I propose in this paper to present a few facts and figures connected with the progress of higher education in the Bombay Presidency since the establishment of the Bombay University. This is the only part of British India of which I can profess to speak with any knowledge of its educational institutions; but though the scope of this paper is thus limited, the conclusions which may be drawn from the circumstances of so large an area may perhaps be accepted as sound, generally, for other Presidencies. The propositions which I wish to establish are: (1) That the British Government has not been unmindful of its duty as regards the provision of higher education for the people of India; (2) that certain classes of the people have not failed to appreciate our educational policy, and have materially assisted in its development; and (3) that, so far as the recruit-

ment of certain branches of the public service is concerned, one of the results of that policy may fairly be regarded as successful.

It was in the days immediately following the outbreak of the Mutiny that the Government of India determined, with admirable prescience and without any reservation, to establish Universities 'for the better encouragement,' as set forth in the Act of Incorporation of the Bombay University, 'of her Majesty's subjects of all classes and denominations . . . in the pursuit of a regular and liberal course of education.' These universities were not to be teaching institutions, but boards having the control of examinations, on the model rather of the London University than of Oxford, Cambridge, Edinburgh or Dublin. We have as yet no University Professors in Bombay, though there are two lecturers annually appointed to deliver certain courses of lectures; nor are the students of affiliated colleges, nor even the graduates of any grade as such, members of the University. The Act of Incorporation states that the University is established 'for the purpose of ascertaining, by means of examination, the persons who have acquired proficiency in different branches of literature, science, and art, and of rewarding them by academic degrees as evidence of their respective attainments.' It may be interesting to observe at the outset that in Bombay we have given a comprehensive meaning to the word 'persons,' as used in the Act, and have felt no nervous dread whatever at the thought of conferring degrees on women who have earned them. Among our 'girl graduates' we number at least one Bachelor of Arts and one Master of Arts, one Bachelor of Science, and three Licentiates of Medicine and Surgery; while we have,

as a member of the Senate, the late Senior Physician of the Cama Hospital for Women, Mrs. Pechey-Phipson, who was appointed by the Government of Lord Harris a Fellow of the University (and, as such, a member of the Senate), with the full approval of all competent educational authorities.

The affairs of the University are superintended by a Senate, which consists of a Chancellor, who is the Governor of Bombay for the time being, a Vice-Chancellor, who is appointed by the Government, and a certain number of Fellows, not less than twenty-six, who are either Fellows in virtue of certain offices held by them, or are appointed by the Government. As a matter of practice, in recent years, the number of new Fellows appointed in each year has not been less than twenty. It is found necessary to make so many appointments, not only to cover casualties from death, resignation or departure from India, but also to secure a continuous and adequate representation in the Senate of the four Faculties of Arts, Law, Medicine, and Civil Engineering, in which degrees are granted, and a representation also of the various races, creeds and communities interested in the efficiency of the University. A few years ago a constituency was formed, at the suggestion of Lord Lansdowne, consisting of graduates of a certain standing, to whom the right of nominating two Fellows annually has been given. If the nominations are accepted, the appointments are in due course made by the Governor in Council, under the Act. At the date of issue of the last University Calendar, there were the names of 330 Fellows on the rolls of the University. The actual executive administration of the University is conducted, however, not by the Senate, but by a syndicate consisting of the Vice-

Chancellor and ten Fellows, annually elected as Syndics by the members of the Senate constituting the four Faculties.

Subject to the approval of the local Government, the Senate is empowered to make byelaws and regulations regarding examinations for degrees and all preliminary examinations, and also regarding the course of instruction to be undergone by candidates for degrees. It is the duty of the syndicate, subject to the control of the Senate, to appoint University officers and examiners, to fix their salaries and emoluments, to make arrangements for examinations, to keep accounts, to consider proposals by members of the Senate, and to frame byelaws and regulations for the approval of the Senate. Degrees are conferred at an annual convocation, which is presided over with much ceremony by the Chancellor or the Vice-Chancellor.

Though the University—that is, the 'Body Politic and Corporate,' consisting of the Chancellor, Vice-Chancellor and Fellows—is not a teaching institution, it is obvious that, by the mere exercise of the powers conferred on it by law, it must wield a powerful controlling influence over the course of study in all teaching institutions throughout the Presidency; not merely in the large High Schools maintained at the cost of the State in each District, but in all other High Schools (whether maintained by Municipalities or by Native States, or by private enterprise, aided or unaided by the State) which teach up to the University Matriculation standard, but more especially also in the recognised Colleges (whether Government institutions or not) which receive students only after they have matriculated and prepare them for degrees by a graduated course of instruction, extending over several years, in

strict conformity with the Regulations of the University. There were in 1895–96, in the Bombay Presidency, 107 High Schools, as distinguished from 341 other Secondary Schools (known as Middle Schools), which do not teach up to the matriculation standard—with an attendance of 30,314 scholars. Of these High Schools, twenty-one are State Schools, and fifty-five are aided by the State. The Bombay Government has recently had occasion to express its satisfaction with the general efficiency of all the Secondary Schools and with the arrangements for training teachers for them. There are at present thirteen Colleges and six Law Schools recognised by the University as competent to prepare candidates for degrees or for one or other of the preliminary examinations. Some of these institutions have achieved the highest reputation as homes and nurseries of sound learning. They have had the good fortune to secure a succession of principals and professors well equipped for their work, in sympathy with the student class, and alive to the obligations resting on them as interpreters of the wisdom of the West in the class-rooms of India of the Victorian Era. A mere cursory reference to the account given in the University Calendar of such State institutions as the Elphinstone College and the Grant Medical College in Bombay and the Deccan College and the College of Science in Poona; of the Wilson College in Bombay, named after the devoted missionary, the late Dr. John Wilson, and maintained by the Free Church of Scotland; and of St. Xavier's College, with its accomplished professorial staff, will suffice to show how carefully the educational requirements of the Presidency have been provided for. It is only right to add that, of the nineteen recognised institutions, five are maintained in

the important native States of Baroda, Kolhapur, and Bhavnagar by the enlightened rulers of those States.

It is worthy of notice that, in the management of these Colleges, the necessity for attending to the physical and moral development of students is not lost sight of. There is a Public Schools Athletic Association now in Bombay, which has received a most encouraging amount of support from a large number of schools and colleges, and, as further illustrating the zeal of our best educationists, I may refer to a single passage in the last report submitted to the Bombay Government by Mr. Chatfield, who has lately retired from a long and able administration of the Department of Public Instruction in the Bombay Presidency. He tells us that Mr. Selby, the Principal of the Deccan College, has made it a condition for the admission of undergraduates that they should obtain certificates of character and conduct from the Headmasters of High Schools, who are expressly invited to use special care and discrimination in granting such certificates, and not to treat them as merely formal—the object being to impress young men with the idea that admission to a college is a privilege of which they must be worthy, and not a right to be claimed without regard to character or conduct. With a knowledge of such facts as these, and of the forces constantly moulding the character of students while subject to the influences and associations of a well-ordered college life, it can be understood that, though the University authorities may not themselves be in touch with the great mass of undergraduates, yet, at the annual convocation, the Vice-Chancellor can, with some confidence, charge each candidate for a degree, as he comes before him, 'by his

life and conversation to show himself worthy of the same.' Such an injunction thus becomes no mere idle formula. It is rather a solemn parting word to the graduate that he should never, by idle word or corrupt act, dishonour himself or the University which has watched, controlled, and tested his progress during the critical years of his student life.

For many years, the Bombay University was supported by annual grants of public revenue, to enable it to pay the salaries of its officers and the emoluments of its examiners. The evident intention of the Act of Incorporation was, however, that the expenses of the University should be met from fees levied from candidates for examinations. But at first, and for a long time, these fees were quite inadequate for the purpose, and hence it was necessary to supplement them. By a recent judicious revision of the fee table, the University has been placed in a state of financial independence, and now receives a State grant of only Rs. 2,000 a year, for the maintenance of the trim garden which surrounds the University buildings. The time, I hope, is not distant when, from its own resources, aided by the gifts of public-spirited citizens, the University will enlarge its operations by founding professorships of its own in various departments of knowledge and research. But though a public grant-in-aid is no longer given, because it is no longer wanted, it is clear, from the foregoing sketch—though in barest outline—of the position of the University in relation to the Colleges and High Schools of the Presidency, that the Government has not overlooked its responsibilities in respect of higher education.

Mr. Chatfield refers, in his last report, to the action taken by Sir Richard Temple's Government in offering

graduates a practical monopoly of higher appointments in the department of Land Revenue. Until this was done, there was no marked increase annually in the number of graduates in Arts. In 1866 there were 15 graduates in Arts; in 1876 the number was 21, and in 1886, 72. In 1895 there were 190 such graduates, including 8 students who took the degree of Bachelor of Science, which is granted in the Arts Faculty. In 1896 the number fell to 155. The pursuit of learning by Indian students has also been specially encouraged by the provisions of an Act of the Government of India (Act XIV. of 1869), which opens subordinate judgeships in the Bombay Presidency to graduates in Law, who must, however, comply with certain requirements of the rules relating to the Provincial Civil Service before they can be nominated to these offices. Again, under the rules of the High Court, a graduate in Law requires no other legal qualification than his degree for practising as a pleader. There were on the 1st of April last on the rolls of that Court the names of 347 pleaders, of whom 229 were Bachelors of Laws. Of the 9 judges of courts of Small Causes in the Bombay Presidency, 4 are graduates of the University. Of the 103 subordinate judges in the Presidency proper, excluding Sind, 26 are graduates. Again, the degrees in Medicine and Civil Engineering qualify for admission to other public departments, as well as for honourable careers in open professions. Such considerations have had their weight with those castes and classes of whom the love of learning is a notable characteristic, and goes far to explain the growth on Indian soil of so exotic an institution as a university of an European type.

The benefactions and endowments recorded in the

Calendar have also conduced to the same end; and, as observed by the late Vice-Chancellor, Sir John Jardine, 'year by year, the path of the poor student in his upward career is being made easier.' It is very gratifying to note the list of benefactions, beginning with the gift of Rs. 100,000 by the late Sir Cowasjee Jehangier, towards the cost of the beautiful Convocation Hall, bearing his name, and constructed from designs by the late Sir Gilbert Scott; as well also the noble Rajabai Clock-tower and the well-proportioned University Library, towards the cost of which Rs. 400,000 were contributed by a well-known citizen, Mr. Premchand Roychand, and the larger list of 77 endowments, which include 23 scholarships and prizes for successful students at the Matriculation examination, 12 for candidates at the previous examination, and 4 for candidates at the intermediate examination in Arts, and 9 at the B.A. examinations, including the Kinloch Forbes and Cobden Club Gold Medals; a Fellowship also for Bachelors of Arts and Bachelors of Science, and a scholarship to be awarded at the second B.Sc. examination. There are also 2 scholarships, 2 gold medals and 2 prizes awarded at the M.A. examination; and 2 scholarships, 2 prizes and 1 gold medal at the several examinations in Law. There are gold medals, prizes, and scholarships also for proficient candidates in Medicine and Civil Engineering; and, lastly, there is a travelling Fellowship, tenable for three years, and worth Rs. 750 a year, in addition to accumulations, for which the University is indebted to the generosity of the late Sir Mangaldas Nathubhoy. It is the earliest of the endowments, having been offered in 1862 and accepted in 1863. Up to the present time, it has enabled 11 graduates in the four Faculties to complete, by

further study in Europe, the course of education which they had undergone in India.

Such figures as the following will give some idea of the progress of the University. In 1859, at the first Matriculation examination held by the University, at which it was my privilege to be one of the examiners, there were (I speak from memory) only 67 candidates. In 1895 the number had increased to 2,981 candidates, sent up by 115 schools from all parts of the Presidency. Of these, 944 passed the examination. In the previous year, the corresponding figures were 3,209 and 934. At Calcutta and Madras the numbers are, I believe, much larger still.

In 1865, only 2 candidates passed the examination for the M.A. degree. In 1875, there were again only 2 successful candidates; in 1895 the number was 12. In 1862 there were 4 Bachelors of Arts; in 1872 there were 12; in 1882, 36; in 1892, 130; in 1896, 139. In 1882 there were 2 Bachelors of Science; in 1896, 10.

In 1866, only 2 degrees were granted in Law. In 1876 the number was 5; in 1886 it was 17; in 1891, 39; in 1893, 43; in 1895, 61; though the number fell in 1896 to 39; to rise again, however, in 1897 to 71.

In 1862, there were 4 graduates in Medicine, who took the degree of Licentiate of Medicine. In 1872, 6 such degrees were granted; and in 1876, 16. In 1882, 15 candidates took the degree of Licentiate of Medicine and Surgery. In 1892, 22 candidates took the same degree; in 1895, 24; and in 1896, 13. The degree of M.D. has been conferred on 5 students between 1876 and 1892.

In the Faculty of Civil Engineering, only one candidate has obtained the higher degree of 'Master.'

In 1869, only one degree of Licentiate of Civil Engineering was granted. In 1879, there were 16 Licentiates; in 1889, 22; and in 1893, 42; but in 1895 there were only 13. Diplomas in Agriculture have also been granted in this Faculty since 1892.[1]

Again, in 1866, there were only 5 affiliated or recognised colleges and institutions at which candidates for degrees could keep terms; and on the rolls of these colleges there were only 293 names. In 1871–72, there were 8 colleges, with 623 undergraduates; and in 1895 the numbers had risen to 14 colleges, with 2,515 undergraduates. The Government expenditure on Arts colleges alone rose from Rs. 74,946 in 1866, to Rs. 176,556 in 1895–96.

It appears, therefore, that the policy of the Government has been appreciated and also supported. The benefits conferred by it have also been readily appropriated; but not, I am sorry to add, by all the 'classes and denominations' for whom those benefits were intended. It is notorious that the Mahomedans have not made use of the means of education provided for them to any appreciable extent. For instance, in 1896, 222 degrees were conferred by the University; but of these 5 only were conferred on Mahomedans. Again, in the list of subordinate judges already referred to, I cannot find a single Mahomedan name. In Sind, one only of the 13 subordinate judges is a Mahomedan —a very meagre proportion in a province of which seventy-five per cent. of the inhabitants are

[1] From a statement prepared for me by Dr. D. MacDonald, Registrar of the Bombay University, but received after this paper was read, it appears that in the last 36 years, 3,641 degrees have been conferred by the University. It is estimated that nearly 1,200 graduates have entered the liberal professions, and that 465 are at present in the public service, of whom 182 are employed in the Educational Department.—H. B.

Mahomedans. In the High Court, however, we find the Mahomedan community equally represented, in the person of Mr. Justice Badrudin Tyabji, with the Hindus; and Mr. Badrudin's son, Mr. Mohsan Badrudin, a member of the Imperial Civil Service (which he entered by open competition in England), is a joint sessions judge in Sind.

It is important to consider whether the public service, which is now, in its several departments, recruited to a large extent in the Bombay Presidency from the ranks of educated Hindus and Parsis, has gained in efficiency by the displacement to such extent of the class of officers who, though they have kept no terms at a college, nor had their qualifications tested by examinations for degrees, have yet, throughout the length and breadth of the country, for generations despatched the business of the courts and public offices effectively and loyally. In certain Indian communities the aptitude for public business is hereditary; and it is easy to understand that, in certain official positions, the graduate, whose degree is of itself no guarantee of fitness for affairs, may find himself at a disadvantage as compared with officials whose qualifications are based on practical experience of departmental business. Still, speaking for that department of the administration with which I have myself been more closely associated, I have no hesitation in saying that the judicial branch of the provincial service has distinctly improved in tone during the last thirty years, and that, though this improvement is due partly to the enhanced attractions of the service, consequent on a liberal revision of salaries, it must, in fairness, be ascribed also in part to the extension of higher education. Although, as I have already pointed out, only about twenty-five per

cent. of the subordinate judges are graduates, yet the remaining seventy-five per cent. have qualified themselves for their appointments by passing a somewhat severe test in law prescribed by the Chief Justice and Judges of the High Court. The judicial service is practically manned by the educated classes, and civil justice is, as a rule, administered by the members of this service in a manner which commands public confidence; and, indeed, I do not myself understand how our elaborate systems of civil administration, which have a tendency always to become more complex, can be maintained in satisfactory working order without the co-operation of a staff of indigenous officers prepared by a course of liberal education, in the English sense, to assimilate our methods and enforce them intelligently. There have, no doubt, been disappointments such as those I have spoken of. We have not been able to throw the net as wide as we wished to throw it. We have not yet conquered the unwillingness of certain communities to take the torch of knowledge from our hands. And we have had discouragements of another kind. There are those who have taken the gift readily enough, but, instead of profiting by it, by letting the light illumine their own lives and those of others, have shown themselves, in their 'lives and conversation,' more in sympathy with past ages of bigotry and misrule than with the brighter era of peace and justice and good government with which their country is now blessed. But we cannot put the clock back to please anyone. We know that, in spite of all disappointments and discouragements, there are yet many good men and true among our Indian graduates who have given ample proof of their willingness and their ability to help the cause of good government. Such men are

to be found in all Departments, in the Offices of the Government Secretariat, in the Departments concerned with the administration of the Land Revenue and Finance, of Education, of Medicine, of Public Works, of Political Affairs, and in the Magistracy. I have spoken already of the Subordinate Judicial Service; and it is only necessary for me to add that, in the higher branches of that service, our Indian graduates are most ably represented by two District Judges, Mr. Dayaram Gidumal and Mr. Raghunāth Shivram Tipnis, and in the High Court by Mr. Justice Mahadev Govind Ranade, who was preceded in his high office by two other distinguished graduates, the late Mr. Justice Nanabhai Haridas, a profound Hindu lawyer and a man of fearless independence of character, and the late Mr. Justice Kashinath Trimbak Telang, whose appointment to the High Court, at an unusually early age, was hailed by men of all communities as suitable in every way; for he was recognised by all as eminently fitted for the position by scholarship, by general culture, by knowledge of law and grasp of legal principles, by sound judgment and by every other judicial virtue. He always took an active part in the work of the University, of which, at the time of his much lamented death, he was the Vice-Chancellor; and in that office he was succeeded by another distinguished graduate, happily still with us, Dr. Ramkrishna Gopal Bhandarkar, whose fame as a Sanskritist extends far beyond his native land.

Examples such as these, quite apart from any considerations having reference to the advancement of learning, afford the surest justification of the policy of our Indian University Acts, and give warrant also for the highest hopes for the future. If we have taught

the Indian schoolboy to 'speak the tongue that Shakespeare spake,' we have gone far to teach him to love that tongue and all that has nobly found expression in it; to realise, in short, his share in the precious heritage left to all English-speaking men and women by their greatest speakers and writers, by poets, philosophers, divines, statesmen, historians, novelists. The contemplation of such a bequest in all its grandeur and all its glory, and a realisation of the strength and the sustenance which it brings, may yet inspire the sentiment, where it does not exist already—

> Here and here did England help me;
> How can I help England?

H. M. BIRDWOOD.

Female Education in India

Professor Gokhle

Standing here as I do, my mind cannot help being filled with thoughts in which regret and gratitude and hope are all strangely blended together. I stand before you as a representative of the only part of this great Empire which is far behind the rest in its enjoyment of the blessings of what may be called modern civilisation. And yet we were the first to emerge from barbarism, and my nation was not only great, but was the greatest of all on the face of the earth, long before anyone had heard anything of the oldest States of the West. Time, however, which brings ripeness to the raw fruit brings also decay to the ripe one, and the country which was once the cradle and long the home of a noble religion, a noble philosophy, and science and art of every kind, is, at the present day, steeped in ignorance and super-

stition and all the moral helplessness which comes of such darkness.

But while this reflection fills me with what you will all admit to be a natural feeling of sadness, it is coupled with brighter thoughts, for they are the thoughts of gratitude and hope. Among the many achievements and triumphs of this Victorian era, which you are celebrating with such legitimate satisfaction, there is, to my mind, nothing comparable to the work—the thrice blessed work—of regenerating ancient India which you have on numerous occasions pledged yourselves to achieve, and which has already been so worthily begun. The situation is, in many respects, perfectly unique in the history of the world. A great Eastern civilisation, stationary for many centuries, is being once again galvanised into life by reason of its coming in contact with a younger and much more vigorous civilisation of the West. The retention of all that is great and noble in our national life, as it has come down to us from the past, and the fullest absorption of what is great and noble in the life of the West, as revealed to us by our connection with England—this is now the work which has to be accomplished before we can once more hold our head high as a nation. How far such an ideal union of the different elements constituting the two civilisations is possible time alone will show. The task is one of extreme difficulty, but when it is achieved, if it can be achieved at all, the reward will be correspondingly great.

A wide diffusion of female education in all its branches is a factor of the highest value to the true well-being of every nation. In India it assumes additional importance by reason of the bondage of caste and custom which tries to keep us tied down to certain

fixed ways of life and fixed modes of thought, and which so often cripples all efforts at the most elementary reforms. One peculiarity of the Indian life of the present day is the manner in which almost every single act of our daily life is regarded as regulated by some religious notion or another. We must eat, and sleep, and even stand, and sit, and walk only in accordance with certain religious beliefs, and the slightest departure from the accepted ideas in these matters is understood to increase the difficulties in the path of our salvation. And, naturally, these ideas have a far stronger hold on the minds of women than of men. All who know anything of Indian women know that the turn of their mind is intensely religious—a result due, in no small measure, to their being shut out from all other intellectual pursuits. And this combination of enforced ignorance and overdone religion not only makes them willing victims of customs unjust and hurtful in the highest degree, but it also makes them the most formidable, because the most effective, opponents of all attempts at change or innovation. It is obvious that, under the circumstances, a wide diffusion of education, with all its solvent influences, among the women of India, is the only means of emancipating their minds from this degrading thraldom to ideas inherited through a long past, and that such emancipation will not only restore our women to the honoured position which they at one time occupied in India, but will also facilitate, more than anything else, our assimilation of those elements of Western civilisation without which all thoughts of India's regeneration are mere idle dreams, and all attempts at it foredoomed to failure. The solution appears simple enough, and yet no problem in India is surrounded with greater

difficulties or requires a more delicate and patient handling.

You, in this country, who are far more fortunately circumstanced, will find it hard to realise the exact nature or the full meaning of these difficulties. You have long left behind the period when it was necessary for any one to demonstrate to you the necessity of vindicating the dignity of female education. And practically, at the present day, the highest education which this great country of yours can provide in the different sciences and arts is freely available to your women, and is freely availed of by them. It is true that the lingering bigotry of men still tries here and there to throw small obstacles in your way, but they are, comparatively speaking, of little importance. If, for instance, men will not allow you to be called Senior Wranglers, that only enables you to claim a higher distinction—that of excelling Senior Wranglers. The freedom to acquire knowledge, and secure the culture of mind which that knowledge brings, is enjoyed in this country by men and women in an equal degree, and if any individual fails to take due advantage of this freedom, the responsibility for such neglect belongs to that individual, or that individual's guardians, and to no one else. In India, however, the state of things is entirely different. The position there cannot be better described than in the words of Lord Ripon's Education Commission, which ran thus: 'The social customs of India, in regard to child-marriage and the seclusion in which women of the well-to-do classes spend their married life in most parts of the country, create difficulties which embarrass the promoters of female education at every step. The duration of the school-going age for girls is much shorter than that for boys. It usually terminates at nine, and seldom

extends beyond the eleventh year. At so early an age a girl's education is scarcely begun ; and in very few cases has the married child the opportunity of going on with her education after she leaves school.' I must state here that this description does not apply to the Brahmins in Bengal, who, though Hindus by race, have broken from all Hindu traditions, and have cut themselves off from the Hindu community. It also does not apply to the Parsees and the native Christians. These three classes no longer suffer from the evils of early marriages, or, rather, early betrothals, and there is no enforced seclusion of married women among them ; but, after all, numerically speaking, they are a mere drop in the ocean. The description is essentially true of the whole Mahomedan community, and of the vast bulk of the Hindu community. And yet, so far as the Hindus are concerned, their women occupied a much more honoured and dignified position than this at one time. There is no doubt whatever, as stated by Dr. Bhandarkar, the foremost Sanskrit scholar in Western India at the present day, that in very old times, Indian women were not debarred from the highest education. In the Vedic period—the remotest past of which we have any record —about five thousand years ago, they were among the inspired writers of sacred hymns, on which our religion is based. In the Upanishads—philosophical writings subsequent to the Vedas—they are mentioned as taking part in the discussions of the assemblages of learned Rishis, in which the highest problems about the world and the Supreme and the Individual soul were discussed. In our great epic poems—descriptive of a period subsequent to the Upanishads, but still considerably anterior to the Christian era—they are represented as going through a regular course of education, of

which drawing, music, and even dancing (which is now considered degrading), formed part; they mixed freely with men and entered into learned discussions with them on spiritual and other difficult subjects. When Buddhism took its birth in India by way of protest against the sacrificial and ritual part of Hinduism, we find women actively assisting the reform which Buddha had inaugurated, and discussing with him abstruse points about duty, virtue and absolution. It is only when we come to the period of our dramatic literature that we perceive a tendency in women to fall behind men in learning. We then find them not as well versed as men in the classical language, but even then they could read and write and compose poetry in the popular languages. And even so late as the eleventh century—the century which first attracted Mahomedan invaders to our land—we find instances of women possessing a high degree of education and engaged in intellectual pursuits. Then, almost suddenly, all light seemed to be extinguished, and for the last seven centuries our female world has been enveloped in a kind of intellectual gloom.

My friend, Mr. Romesh Chandra Dutt, thus writes, about the position of women in ancient India, in his admirable work on 'Civilisation in Ancient India:'—'We cherish the picture of the cultured lady, Viswavara, which has been handed down to us through thousands of years, a pious lady who composed sacred hymns, performed sacrifices, and with simple fervency invoked the god Agin to regulate and keep within virtuous bounds the mutual relations of married couples. We meet with the names of other ladies, also, who were among the writers of the sacred hymns of the Rig Veda.' In another place Mr. Dutt writes:—'We have seen that

the absolute seclusion of women was unknown in ancien India. Hindu women held an honoured place from th dawn of Hindu civilisation four thousand years ago they inherited and possessed property; they took share in sacrifices and religious duties; they attende great assemblies on State occasions; they often dis- tinguished themselves in science and the learning of their times. And they even had their legitimate influence on politics and administration. Considered as the intellectual companions of their husbands, as their friends and loving helpers in the journey of life as the partners of their religious duties, and the centre of their domestic bliss, Hindu wives were honoured and respected in ancient times.'—And again:—'We saw in our account of the Epic period that ladies sometimes devoted themselves to the pursuit of philosophy, that Eargi Vacaknavi distinguished herself among the learned men of the Court of Janak. . . . . Magesthanes is a witness to the fact that sacred learning and philosophy were not forbidden in the rationalistic period to such ladies as desired to devote themselves to such studies.'

Education, enlightened freedom, and an honoured position in Society, these—and not enforced seclusion and ignorance—are the rightful inheritance of Indian women. The last seven centuries of darkness have, however, so effectually done their work that anyone who reminds the Indian people of this past state of things, and asks them to make an attempt to return to it, runs the risk of being set down as an innovator. And in this, as in several other matters, it is England that is awakening us to a true sense of our duty. Of course, even before the advent of the British into India, instruction of a most rudimentary character in reading

and writing was sometimes imparted here and there to girls of the upper classes, but this instruction was not based on any system, and it possessed no organised character. Its nature is thus described by the Education Commission :—'Apart from the Sanskrit traditions of women of learning and literary merit in pre-historic and mediæval times, there can be no doubt that when the British obtained possession of the country, a section of the female population was educated up to the modest requirements of household life. In certain provinces little girls occasionally attended the indigenous village schools and learned the same lessons as their brothers. Many women of the upper class had their minds stored with the legends of the Puranas and Epic poems, which supply impressive lessons in morality and, in India, form the substitute for history. Among the lower orders the keeping of the daily accounts fell, in some households, to the mother or chief female of the family. The arithmetic of the homestead was often conducted by primitive methods, addition and subtraction being performed by means of flowers or any rude counters which came to hand. Among the more actively religious sects and races girls received education as a necessary part of their spiritual training. In the Punjaub they may still be seen seated in groups around some venerable Sikh priest, learning to read and recite the national scriptures or Granth, and the Brahmin tutor of wealthy Hindu families does not confine his instruction to the sons alone. In some parts of the country such education as girls obtained was confined ostensibly to reading and arithmetic, writing being an art not held suitable for women of respectable life. . . . As a matter of fact, there always have been women of great accomplishments

and strong talents for business in India. At this moment, one of the best administered native States has been ruled during two generations by ladies—the successive Begums of Bhopal. Many of the most ably managed of the great landed properties or Zamindaris of Bengal are entirely in the hands of females; while, in commercial life, women conduct, through their agents, lucrative and complicated concerns. But the idea of giving girls a school education, as a necessary part of their training for life, did not originate in India until quite within our own days. The intellectual activity of Indian women is very keen, and it seems frequently to last longer in life than the mental energies of the men. The intelligence of Indian women is certainly far in advance of their opportunities of obtaining school instruction, and promises well for their education in the future. It will thus be seen that, for systematic and organised efforts for the promotion of female education, as also for a correct appreciation of its importance as a factor of individual improvement and national progress, we are indebted almost exclusively to the influences introduced into the country by British rule, and these influences, moreover, have been brought to bear on us on a large scale only since the accession of the present Sovereign to the Throne. A brief account of the work achieved so far in this field in the different provinces of India will not be out of place in this paper.

Beginning with my own presidency, Bombay, we find that the credit of making the first organised effort to educate Indian girls belongs to the American Missionary Society, who opened, in 1824, the first native girls' school in Bombay. By the year 1829, no fewer than 400 female pupils were receiving instruction in their schools. The Scottish Missionary Society was

not long in following the example of the American Society, and Dr. Wilson, one of the most respected names in India, established on its behalf six schools for native girls in Bombay in 1829. In 1840, this Society opened five schools for high-class Hindu girls in the neighbourhood of Poona. It was not till 1851 that the Indians themselves came forward to work in this field. In that year the Students' Literary and Scientific Society was formed, which counted among its founders and earliest workers such men as Mr. Dadabhai Naoroji, the late Mr. Mandlik, and others, and which has on the whole done most excellent work. This Society began its operations with nine vernacular free schools, attended by more than 650 girls. In 1854, the Court of Directors addressed to the Government of India the famous Despatch on Education, which laid down the lines on which the work of educating the Indian people was to be undertaken by the Government. It is a wonderful document, and no wonder that it is so, seeing that it is reputed to have emanated from the pen of John Stuart Mill. This Despatch laid great stress on the urgency and importance of female education in India, and led to Government joining in the good work, which till then had been left entirely to private enterprise. Later on, the visit of Miss Mary Carpenter, whose name will always be gratefully cherished by the Indian people, gave a great and much-needed impetus to the movement, and Female Normal Schools, for the supply of female teachers, were established in Bombay, Poona and Ahmadabad. The progress in female education in the Bombay Presidency during the last half-century has indeed been continuous and remarkable. In 1854 there were 65 girls' schools, attended by 3,500 pupils. In 1869, the number of schools

had risen to 209, and that of pupils to over 9,000. In 1881, the number of schools stood at 343, with over 26,000 pupils. Last year there were 900 schools for girls, with an attendance of over 84,000 pupils.

In the Madras Presidency, the first attempt at providing schools for native girls was made in 1841 by the missionaries of the Scottish Church. In 1845, the first girls' school under partial native management was opened. When the Despatch of 1854 arrived in India, there were in the Madras Presidency 256 girls' schools, attended by about 8,000 girls. In 1881, the number of schools had risen to 557, and that of pupils to over 35,000. Last year there were in the Madras Presidency over 1,000 schools, attended by nearly 110,000 girls.

The Despatch of 1854 found 288 girls' schools, with nearly 7,000 pupils, in Bengal. But included in this number was an institution which has since become famous in the history of female education in India—the Bethune Girls' School in Calcutta. The following account of this institution is given in the report of the Education Commission:—'This institution was established in 1849, and bears the name of its founder, Mr. Drinkwater Bethune, then Legal Member of Council, who took an active part in many movements for the advancement of native society. It was opened under the name of the Hindu Female School, with twenty-three pupils, and was for some time maintained at the entire cost and under the direct management of Mr. Bethune, who also by his will left lands and other property in Calcutta for its endowment in perpetuity. On his death, in 1851, it was taken up by Lord Dalhousie, who for nearly five years paid 8,000 rupees annually for its maintenance from his private purse. The charge was afterwards transferred

to the State, although the direct management of the school continued and still continues in the hands of a committee. Unlike the earlier missionary efforts, the Bethune School rests on a secular basis; and the committee aims at conducting it in accordance with national Indian feeling. It derives its pupils chiefly from the higher classes, exacts an adequate payment for boarding and other charges, and carries its instruction up to University standards.' The number of girls' schools in 1881 stood at over 1,000, with an attendance of over 41,000 pupils. Last year these figures were 3,352 schools, and 114,000 pupils.

The early efforts of the missionary societies towards the spread of female education were not very successful in the North-West Provinces, and the Despatch of 1854 found only 17 missionary schools for girls, with an attendance of 386 pupils. After the receipt of the Despatch, Government took up the work with great zeal, and by 1871 the number of girls' schools in these provinces had reached 640, and the number of pupils nearly 14,000. Then the progress was suddenly arrested, and for ten years there was actually a retrograde movement, which is thus described by the Education Commission :—'Between 1871 and 1881 a great decrease took place in girls' schools. Their abolition was mainly due to the financial position of the Government. It was felt that, if retrenchments were necessary, they could be carried out in the girls' schools with the least prejudice to education. By 1881 the number of schools had dropped from 640 to 308, and the number of pupils from 14,000 to less than 9,000. The ground thus lost has not been recovered yet. Last year the number of girls' schools in these provinces stood at 425, and the number of pupils at about 12,500.

'In the Punjaub, the indigenous schools for religious instruction have always been useful in imparting the rudiments of reading and writing to females, and even at the present day we have over 900 of such schools, attended by nearly 13,000 girls. In addition to such schools, the Despatch of 1854 found 17 missionary schools attended by 300 girls. The work was then taken up by Government with great energy, and by 1871, 465 secular schools had been established, attended by nearly 12,000 girls. Then the numbers began to decrease, as in the North-west Provinces, and by 1881 they had dropped to 311 schools and 9,000 pupils. Last year these figures stood at 362, and a little over 13,000, respectively.

'Thus in these five provinces we had, in 1854, about 600 schools for girls, attended by about 19,000 pupils. Instead, we have now over 6,000 schools, attended by nearly 250,000 girls! The progress indicated by these is beyond all doubt most striking, and so far very satisfactory. In one respect, however, there is room for dissatisfaction and even disappointment. Nearly all this progress, remarkable as it is, is confined to primary education. Taking the Bombay Presidency, for instance, we find that among the 900 and odd schools for girls, there are only 60 for secondary education, and even these are for the most part European, Eurasian or Parsee schools. The number of secondary schools for Hindu girls is only 4, with an attendance of less than 200 pupils—the most notable of these being the Female High School in Poona, which owes so much to the inspiration, sympathy, and support of our good friend Sir William Wedderburn. As for higher education, there is not a single female college—arts or professional—in the whole Presidency. The main

difficulty in the way of the higher or secondary education of Hindu girls is, of course, the fact that these girls must be married, or, rather, betrothed before a certain age—the present limit being about eleven or twelve years—and that they are, as a rule, withdrawn from school immediately after such marriage or betrothal. The question is thus intimately connected with another necessary reform, namely, raising the marriageable age of Hindu girls. And the position may be correctly described in the following words of the late Mr. Justice Telang :—" In discussing this matter, we seem sometimes to move in a vicious circle. We cannot successfully raise the age of marriage for girls among any large portions of our community without a wide spread of female education. And, on the other hand, any considerable spread of real female education is hardly possible until the age of marriage is raised. There is a real difficulty here, but the way to meet it is at one and the same time to push on female education to the extent that is possible, under present conditions, and to extend the limits of marriageable age in the same way. And as every advance is secured along either of these lines, the further advance will become more and more easy. Our progress in the later stages will be accelerated, if I may say so, in geometrical progression." '

Even the progress in primary education, which appears so striking, marks, after all, only the commencement of the great work that in reality lies before us. The following figures will make my meaning clear. ' In the Madras Presidency, according to the last census, out of a total female population of 20,000,000, only 250,000 females can read and write, or are under instruction, which gives a ratio of 1 in 80. In the Bombay Presidency the figures are 100,000, out of a

total female population of about 13,000,000, thus giving a ratio of 1 in 130. In Bengal, out of 37,000,000 females, only 150,000 can read and write, or are under instruction, which means a ratio of 1 in 250. In the Punjaub, the figures are 35,000 out of a total of 11·5 millions—a ratio of 1 in 330. In the North-West Provinces we have 50,000 females who can read and write, or are under instruction, out of a total of 23,000,000, which gives a ratio of 1 in 410. The Central Provinces have a female population of 6·5 millions, and of these only 12,000—i.e. 1 in 540—are attending schools or can read and write. Comments on these figures are really superfluous.

The difficulties, apart even from social customs, are many and serious. The supply of good female teachers is certainly far short of the needs of the country. The female training colleges are doing useful work in this connection, but there is a general feeling that they do not attract a sufficiently large number from those classes of women whose employment as teachers would inspire general confidence. Then the question of determining the proper curriculum for girls' schools is surrounded with difficulties. As the appreciation of female education becomes more widespread, men will come to recognise that there ought to be no more impediments in the path of girls than in that of boys in selecting the subjects they are to study or choosing the books they are to read. In our present circumstances, however, when it is necessary for us to work along the line of least resistance, it is necessary to take note of the different surroundings of boys and girls in Indian society in determining the course of instruction, and to make some concession even to popular prejudices on the subject. I fear this has not been done in the

past to the extent that is desirable. The worst defect in the present system of female education in India is the utterly dry, mechanical and uninteresting character of the methods of instruction. Women naturally possess more refined sensibilities than men, and have a finer, more delicate æsthetic perception; and a course of instruction which merely overloads the memory and fails to appeal to the imagination is not calculated to leave on the minds of small girls very agreeable impressions of their brief school career. But, as I have observed above, the good work of female education is only just begun in India, and what has been already accomplished is as nothing compared with what yet remains to be achieved. And I have firm faith that in course of time all the deficiencies which at present constitute so many obstacles in our path will one by one disappear. Here, if anywhere, we feel that the flowing tide is with us. The opposition of my countrymen to the education of their girls, at one time so general and so pronounced, has already softened into indifference, into toleration. And from this to active appreciation is but a single step, though I must admit it is not a short step. Happily there is no trace of hesitation or misgiving in the minds of our rulers on the subject, and philanthropic ladies and gentlemen in this country, to whose sympathy and assistance we are already so much indebted, may well be trusted to continue their good work in the future. What has been said of charity is also true of education. It blesseth those that give as also those that receive. And if any words of mine, addressed to you to-day, lead any to join in the emancipating work of female education in India, I shall feel that my humble labours have been amply rewarded.

I am very glad of the opportunity of saying a few words in support of Professor Gokhle's plea for greater assistance being given to female education in India. I would especially ask the Government to give more active support still, both financial and moral, to this great cause. My reason for this is that female education in India has special needs, and there are special difficulties attending it. I think it has been said by someone that girls' education is two generations behind boys' education, and that is a very serious drawback to social life in India. And, as has also been pointed out, the difficulties in the way are very great on account of the customs which have been enforced upon the Hindoo people during the dark and unfortunate ages through which they have passed since the golden age of Aryan civilisation to which reference has been made. Reference has also been made to the date of 1854, when the great Despatch of Sir Charles Wood was sent out to India. In that despatch the responsibility of the Government was fully recognised. It was not only recognised with regard to female education, but Sir Charles Wood actually said that female education was more important than male education. I would just quote the words he used. He said: 'Through female education a far greater proportional impulse is imparted to the education and moral tone of the people than by the education of men,' and in support of those views he addressed this despatch to the Government of India, in which he said that he approved a frank and cordial support being given to the cause of female education. Then the next important date is 1882, when Lord Ripon appointed the Education Commission, presided over by my gifted friend, Sir William Hunter.

Sir William Wedderburn, M.P.

The report of that Commission recommended that active support should be given and steps taken to promote female education. Of course, it has always been recognised that in a cause like this very much must depend upon the people themselves; and especially upon the women themselves; and I am glad to say that very shortly after the Report of this Education Commission was issued a very important movement was commenced in the city of Poona, which in educational matters takes very much the lead throughout India. A society exists there, an Indian female education society, the name of which is the 'Arya Mahila Sama.' This society met in 1884, nearly one hundred ladies being present, and they passed a resolution calling upon their male relatives to take active steps for the higher education of women. In accordance with this invitation, a very important meeting was held in the town hall at Poona, and stirring addresses were given by Mr. Justice Ranade (to whom reference has been made), by the late Mr. Pandit, who was the pioneer in many respects of female education in Bombay, and by Dr. Bhandarkar, a learned professor of Sanscrit in the Deccan College. I remember very well what Dr. Bhandarkar said, referring to that golden age of Aryan civilisation of which we have already heard: he said that in those days the wife was the companion and friend of her husband, the partner in his joys and in his worldly duties; and he quoted a very beautiful passage from the great Hindoo epic of the Mahabharat, in which the position of the wife is most beautifully described. I do not know any better description that I have ever read anywhere. This is the translation that he gave: 'A wife is the half of a man, and his most excellent friend; she is the foundation for him who seeks to be redeemed, a

friend in solitude, a father in matters of duty, and a mother in distress.' The outcome of this meeting was the formation of the female education society. On that occasion about a lakh of rupees was collected, and not long after the chief of Sangli, one of the Mahratta chiefs, gave a very beautiful site for this Poona High School for Girls, and now this has been established under the management of Miss Harford, a lady of special qualifications, who has won the love and affection of her pupils and the respect and regard of the whole Indian community.

The next date of importance was 1892, when an influential deputation waited upon Lord Kimberley, the Secretary of State for India, and a memorial was persented on that occasion signed by names which for educational and other purposes may be considered, I think, the very highest that could be obtained to any memorial on the subject. In answer to that memorial, asking for further support to female education, Lord Kimberley gave a very encouraging reply, and sent it to the Government of India with an expression of his concurrence in the views that were therein stated. I do not think the objects of female education could be better expressed than they were not long ago, when Lady Lansdowne, the wife of the Viceroy of India, distributed the prizes in the female school in Mysore. This school had been established by the Maharani, the wife of the lamented Maharajah of Mysore who did so very much for his country. In thanking Lady Lansdowne for distributing the prizes, the Prime Minister made the following remarks; he said that 'the school was started by Her Highness the Maharani in 1882, not for the purpose of qualifying women to tunnel mountains, or to make laws, or to make money, but to make them

good directors of home power—a power which we all know it is beyond our means to keep from them, and which they exercise upon us when ignorant with all the powers of a despot, but which, when they are enlightened, they use most beneficially, as our merciful Maharani has done in inducing his Highness the Maharajah to take such active and deep interest in the cause of education and regeneration of her sisters.' This, I think, is an Indian version of the saying that 'the hand that rocks the cradle rules the world,' and we wish that the cradle shall be rocked by one who is wise and educated, and that the ruling of the world shall be in the right direction.

Mrs. Pheroze Thomas

I am amused to find that the views I hold on this subject are very much the same as those of Professor Gokhle, only less pessimistic. Before we go further, I must ask you to remember that, while education has been attended to in the West for several centuries, that of the East can be measured only by decades. Schools and training colleges are the growth not even of one cycle. However this may be, and paying attention to the fact that at one time, hundreds of years ago, when the world was younger, Eastern women were admitted into the field of learning and shared advantages equally with men, the Indian lady of to-day has in the majority of cases more to contend with than at first sight may appear. I am not going to make common cause with critics and pessimists who complain that Indian students of both sexes are not being educated in the true sense of the word, but that they master a few books and pass certain examinations but are incapable of original work. It strikes me that the fault of this lies in the system,

one which has answered so far, but which wants to-day complete reorganisation. Leaving that matter to be attended to by those whose business it is, let us look at a few of the difficulties that beset the path of the Indian girl or woman who goes in for higher education. To begin with, she has not the necessary environment and atmosphere of culture in the home and family circle which are such important factors in the life of her Western sister. Her people may take a certain amount of interest in her studies, and be proud of her attainments, but they cannot enter into them because the studies are probably in English—a language unknown to the older generations—or if in the vernacular, they are on subjects utterly foreign and unintelligible. The girl student thus misses a great deal of sympathy, and finds she is more or less a unit, isolated from the rest of the household by reason of her books. Then, again, the Indian girl at a very early age contracts family ties, which bring with them burdens and responsibilities, leaving no learned leisure for adding to the infinitesimal stock acquired in the short space of school life between six and thirteen years of age. Besides the home atmosphere, the climate is against her. It fosters the passive and introspective, and positively kills the constructive power and energy required for original work. So much for environment. Then we have to get over the stumbling blocks created by the present curriculum; it is nearly all memory work, which by the laws of the inevitable ends in an atrophy of the mental powers. So many subjects fill up the time, that the living teacher has to give way before the dead book. The personal magnetism of the instructor cannot be exercised to draw out the latent energies of the instructed. But there is a

much brighter side of the picture, and one turns with relief to those women who have distinguished themselves in the glorious reign of our beloved Queen and Empress. Among these I am proud to say the Parsees have been in the first ranks. Eminent women have laboured in the educational field; brave women have studied and are practising the art of healing; one has taken the degree of Bachelor of Science, and I note with pleasure that India can even boast of a lady lawyer. I believe I am right in saying she is the only one in that vast peninsula of the dominions which claim your Queen as Empress. During the Queen's reign indigenous schools have given place to Government institutions, and girls are induced to stay longer at schools because of there being women teachers. These women teachers are duly qualified after three to five years' training in properly organised colleges, presided over by English and Indian ladies, who have in many instances been trained in England. Having myself been connected with a training college for women, I feel I can speak of the good work that institutions of this kind are doing in sending out educated and fully qualified women to the girls' schools even in remote villages in the presidencies. Those of us who know India at the present moment must note with gratitude the successful work done by schools for girls. We have not yet an Indian equivalent to your 'New Woman.' Indian girls are trained to be useful housewives while they are indulging in what are termed the higher branches of learning—mathematics and cookery, literature and sewing, go together, thus making them all better wives and mothers. The last two decades have witnessed a great advance in the social life also of Indian ladies, and people who knew India thirty or

forty years ago are surprised to hear of women's literary clubs, where papers are read on topics of the day and lectures given, not only in the vernacular, but in English. More than one of these clubs sent congratulatory addresses to Her Majesty last month.

Some time ago an Indian schoolgirl was heard to exclaim, 'I did not know how pleasant it was to learn.' This new discovery has now been made by many Indian ladies in the last thirty or forty years, the discovery that they have excellent faculties, and that the cultivation of those faculties is enjoyable and also useful. It is true, as we have heard, that the average attendance of girls at school is very low, perhaps only a few per cent., but the number is increasing, and the total is not inconsiderable. School instruction is not the only kind of teaching that is open to Indian girls. Some of them have private teachers, some attend colleges, and it is, I believe, very frequently the case that an educated man gives education to his wife and to his children or his daughter. I believe that most of the educated men in India now are in favour of family education. It is one of the points upon which Indian social reformers seem mainly to agree. The old idea that, if a girl learned to read and write, she would lose her husband early, seems to be dying out, and the great matter for girls is that the women themselves are eager for opportunities of instruction—to use their own expression, they desire no longer to be drowned in the ocean of ignorance—and this education is no doubt most important for them; important for their own development and their own elevation. It is important also because it will make them better companions for their educated

Miss Manning

husbands, and it will enable them to teach their children and to train their children more fully and more judiciously. And, socially, it is well known that it is essential that the women should be educated. Some of the recent difficulties in India have been aggravated by the ignorance of the women, and by their strict adherence to custom, because the uneducated are bound fast by conventional observances. Whether the custom is good or bad, it does not matter; they must keep to it. If you disagree with them, they only say 'Our fathers had this custom, and it is ours too.' And the influence of the women is so great in the family that until they are educated no enlightened social progress will be possible in any degree. I will only add that I think we ought all to try to help forward and sympathise with this desire for education.

Sir John Jardine

I have much the same opinion now after about thirty years' aquaintance with India and Burmah as I had at the beginning of that term about the effect of the education of women, considered from the point of view of the Government and the public service. I think the result will be conservative and in favour of order as much as of progress. You have heard so many interesting things from those who have preceded me, that I will rather turn to one or two points that have not been noticed. While I think that much has been gained for the movement during this generation, I would point out, however, that a large portion of the women of India are very poor people; they have no time and no money for any kind of education, and until the time comes when the rural communities can support some such system as the Board Schools with free education, the majority will not get much educa-

tion. Anyone who goes to an Indian village can hear the natives singing their plaintive songs about 5 o'clock in the morning; they then begin to bake the bread, and after the washing and the family worship, the hard work of the day commences; for they have to work in the fields and on the roads and do a very great deal of daily labour. At the end of such a day there is no time nor inclination for any kind of learning. Take, again, what has been noticed by other speakers as an incident of nearly all life there, the system of early marriage. It is a difficult thing to deal with, and all that Lord Hobhouse has said about caste applies equally to family matters, specially to women and marriage. Therefore, any great progress all along the line is something that has to be done by the people themselves, and must be a work of time. Many causes combine—the poverty of the people, the caste system, the customs of the people—to show that any great advance must be made by the people, and I suppose that may be predicated of any great movement in any country, in Europe as well as in Asia. I think the signs are hopeful; I do not take the dark view. It is difficult for us to know fully what is the feeling of the various peoples of India and Burmah about the women of their households. So far as I know, it is a high one; they are fond of them, they are kind to them, they are good fathers of families, and when the young woman becomes a mother she is specially honoured; they have the endearing term 'the honoured mother,' and the Hindoo husband looks with great regard upon her. She represents home to him, and in several of the Indian languages, if you want to ask how a man's wife and family are, you say, 'How is your tent?' They have a proverb

that a man without a wife has no home. These are very good sentiments that appeal to us as much as to them.

Coming to special points, I remember taking a good deal of interest thirty years ago in a very little school in a backward place in India. With difficulty ten girls were found to attend, and they were absent constantly, and it was urged that Krishna or the others were away that day because they were wanted to clean the copper pots. I am speaking of families that do not employ servants; many of the well-educated people have to do all the work themselves in their own houses, and naturally they want someone to clean the copper pots that are used every day. But, as I say, I think the movement is expanding as regards their esteem of the female schools. Let me mention one thing. In 1864, a time of great speculation in shares, in the cotton trade many great fortunes were made and lost by Europeans and natives; in the City of Bombay there was one man who made a large fortune, and he built at immense expense the noblest tower in India—the tower of the University of Bombay—and he named it after his mother. Another instance I may mention is that of a Brahmin, a learned judge, who, after he had done some public act for which his friends were censuring him, wrote to the papers, and gave as his chief justification that, if he had done otherwise, his mother, whom he honoured, would have been deeply distressed. When you have people with feelings like those, there is hope for the greatest improvement, and I do not doubt that this movement as it extends will have many blessings. The opposition to it has greatly disappeared: we have the forward van represented by men who look back on times long gone by, and wish the country were in

the state it was then; but I am sure that they would admit, as Mr. Justice Ranade and others admitted, that it is necessary to keep before those who wish to go the farthest length, the fact, that they must stay with those who will only go one mile instead of two, for the sake of that great backward multitude who neither know nor care about progress.

These represent some of the difficulties that stand in the way, and as regards the action of the Government, it represents progress, but it also represents order; and I think it is right to pay more attention to the orderly side of things, and leave it to the people themselves to find out where the progress should be.

Mr. Das

Though I speak with diffidence in a foreign tongue, I feel that I should not be doing my duty to myself or the Chairman or Lady Warwick if I do not express my feelings on this occasion. I am thankful to the British Government for the despatch of 1854, to the terms of which reference was made by our Chairman, but at the same time I do not lose sight of the fact that higher education in India does not owe its origin to the British Government only, but to the private liberality of the Christian public in England, because the first high school that was started in Calcutta was a mission school, and mission schools are always started by the Christian public of England. Now it has been suggested that in some quarters there is an apprehension of danger arising from wider education. If there were any danger, though I do not believe there ever was any, or ever will be any, that danger, or the least ground of apprehension of danger, has been removed by the fact that we have used opportunities not for the education of men only, but also for the

education of women. Education for men only, certainly would have been a dangerous thing, or, at least, might have proved a dangerous thing, for it is the education of one half of society. Women exercise a very powerful influence over society, not less so in India than elsewhere. It is a mistake to suppose that the women in India do not command respect, or do not exercise that influence which women exercise in most civilised countries. Reference was made to the fact that improvements and measures of progress met with very powerful opposition from the women. Now it is a fact that the women who are illiterate yet have an influence; and they have the power to render unsuccessful progressive measures inaugurated by a large class of educated men. And what does that show? Does it not show that they have very great influence over society? In fact, in any Hindoo house you will find that all the male members are educated, and hold civilised ideas of life and morality, and yet there are a few illiterate ladies away in the remote corners of the Zenana whose influence is powerful enough to introduce into the family all the most idolatrous and unreasonable customs. That certainly proves that women do exercise a very powerful influence, though it may not be perceived.

I think, perhaps, of all people in the world Englishmen need not be told of the mighty influence of women over society.

The Chairman has referred to the fact that during the last year of his residence in Calcutta he saw the first lady graduate of the Calcutta University. It may be some gratification to him to know that that lady graduate is now the principal of a ladies' college which passes every year at least two or three graduates. I do not come from Bengal, although I am a graduate of

Calcutta University; I come from Orissa, which is a very backward part of the district, and even there female education is making progress to this extent —that young ladies have been supplied with funds by private gentlemen to prosecute their studies in the colleges. That shows that private gentlemen do appreciate female education. Only last week I received the news that two young girls for whose education I was responsible had successfully passed the first Arts examination, and telling me that they wanted to go up for the B.A. degree. That is in the most backward district of Bengal. At the same time, I must tell you that, though I come from a backward district, we have no such thing as early marriages in our part of the country—we are ahead of the most forward district in that respect.

Mr. Theodore Beck

Of the two subjects which have been spoken of to-day—namely, general education in India, and female education—I know very little about the latter, and what I have to say will chiefly relate to the former. In our part of the world, in the North-West Provinces, there is practically no female education, and it is practically impossible to introduce any, because the prejudices of the people are so strong against the English that the upper classes at present will not hear of it. So when that is the state of things there is very little hope for the present generation. I think the young men who are being educated are throwing off those ideas, and are now wishing to have their daughters taught, and after thirty years I hope something will be seen of female education in Upper India.

In regard to the male education, I should like to

make one or two remarks in criticism of the system which is adopted. We have heard in the first paper to-day an account of the vast extent to which male education is provided in India, but I think there are some qualifying remarks in regard to the quality of the education which ought to be made before we take too optimistic a position. In my opinion the education which is given in India is defective, and although it is doing undoubtedly a very great and good work, yet it is capable of so much improvement in the quality, and at the same time it is so difficult to improve it, that I think we ought to direct our attention rather to this side of the matter. The Indian University system is simply a 'cramming' system. The student 'crams' up a large number of subjects which he gets up by heart and never learns anything at all. It is extremely defective also on the physical and on the moral side. As a rule, no influences are brought to bear on the student, except those that are in the class-room, and I think it very necessary that a boarding-house system, like the system we see at our English Universities, should be adopted as far as possible in India, and that it should be one of the main duties of the master who has charge of the education to supervise and look after these boarding-houses. At present a master's work is judged by the percentage of students he crams through a University examination, and men are very largely appointed to posts according to their success in this department. The reason of this is the old system of education, where students, in order to get their bread, have to pass through University examinations at which very often 25 per cent. of the students are 'plucked;' the consequence is that it becomes an absolute necessity for the student to

work as hard as he can for these examinations, and it becomes an absolute necessity for the professor to concentrate his whole attention on getting his students through the examination; consequently we have an utterly foreign idea put before the student. This examination takes up his whole attention; he has no regard or love for knowledge in itself, or such love as he naturally possesses—both Hindoos and Mahommedans have a natural taste for learning—such love as he possesses is knocked out of him by this degraded idea of working simply for examination. I believe that this is very largely stimulated by the system of the Universities in India, and I think it is a very debateable question whether the Universities are a blessing or a curse to India, so far as education is concerned. The Universities do not educate; the Colleges educate; the Universities tie the hands of the Colleges; they say what the Colleges should do. I have been told by a man who is still doing work under both systems that he is not at all sure that the old system, when they had independent Colleges, did not turn out better scholars than the present, when there is this check by the Universities.

Broadly speaking, it seems to me that the University raises up the level of the lower Colleges and lowers the level of the higher ones, because it entirely ties their hands. I also think that the system of having Universities with enormous Senates, composed very largely of men who have no direct connection with the practical working of education, has a bad effect with regard to making any advance in general education. It is a great misfortune for a University to have two or three hundred Fellows. In that respect, our University at Allahabad is more fortunate, because we only have seventy or eighty; but even there my experience is that

the ability to rule can only be possessed by men who have been at work in education, because those not connected with it are apt to think that we are striving to introduce new ideas, and endeavouring to lower the standard of examination. Consequently this large participation by a miscellaneous mass of people in University government in India is not a good thing for education. In the Panjaub University there was a Fellow appointed who could not write his name in any known language or in any language at all; he was put on because he had money, I suppose, and to a certain extent on the ground that the position of Fellow of a University is a cheap distinction—something cheaper than C.S.I. This principle has a most degrading effect upon education, and what we have to endeavour to do is to bring into Indian education new ideas; to look to spreading and implanting a love of knowledge for itself; to attack this education craze which crushes out all originality and all spirit in Indian students; to introduce good boarding-houses; to stimulate a love of physical games, such as cricket and football, to which the natives of India take very easily; to insist on the moral supervision of these boarding-houses; and to represent to the master in charge that it is his first duty to train the character and the mind, instead of simply cramming a percentage to pass an examination.

A vote of thanks to the Chairman, proposed by Sir George Birdwood, closed the sitting of the Congress.

EDUCATION IN THE COLONIES

The chair was kindly taken by Lord Loch, who spoke as follows:

I believe I am correct in stating that all the great

self-governing colonies have educational Acts, differing in many respects from each other; but there is one underlying principle involved in all these Acts, and that is, that the system of education is compulsory. Of course, in some of the colonies it is much more difficult to carry out that compulsory system than in others, owing to the great distances which separate people from each other, and therefore special arrangements have to be made to meet that difficulty. I may say, speaking from my experience as regards two of the great dependencies of the Empire—Victoria and Cape Colony—that education is regarded as a most important element in the promotion and advancement of those countries. One of the questions about which I felt very strongly when I was Governor of Victoria was with regard to the instruction in history, and also in geography, but principally with regard to the instruction that was imparted with regard to the former. I felt that in a new country, with young men and young women growing up, it was very desirable that they should be well acquainted with the history of the country from which they came. People are not apt to value that which comes easily to them, and therefore when the young people saw that all their surroundings were those of freedom and liberty, they were apt to forget through ignorance how that great result had been attained in former years by their ancestors in the old country—their mother-home. I dare say many of you know by name the late Mr. Charles Pearson, who was for some time, when I was Governor of Victoria, Minister of Education; I frequently had conversations with him upon this question, because he entertained a peculiar view upon the subject. He considered that

Lord Loch

neither girls nor boys should commence a study of history until they were seventeen or eighteen years of ago. But that was the age when, in the colonies either men or women had to turn from education to earn their daily bread, and therefore they would not have many opportunities at that period of life to acquire the requisite knowledge of history. I therefore on that ground ventured very strongly to differ from him. I do not know whether you have read a very able book which he published shortly before his death, in which he enters into that particular question. I would venture, in speaking to this large meeting, and before those begin who are to address you with regard to the education in other colonies, to urge upon them and upon you the very great importance of giving the youth of our great dependencies a knowledge of English history, so that they may realise what they have acquired through the exertions of their forefathers, and appreciate what they possess.

There is one phase of education which has been taken up very strongly by Victoria and the Cape Colony, and that is a thorough teaching of needlework on the London Institute [1] system. It enables young women to be very useful wives, and very useful in the duties they are called upon after marriage, and very often before marriage, to discharge. I may say that as regards Victoria, which was the first of the colonies to enter upon this system of teaching, it was greatly due, I believe, to the exertions of Lady Loch upon the subject. I may be pardoned for mentioning that, but it was taken up by the Minister of the colony, and it has grown with very great success. At the Cape Colony it is strongly encouraged by the very able gentleman at the head of

[1] *Facts for Women.*

education in that country, Dr. Muir, and the results have been most satisfactory. Even the coloured girls show great aptitude in learning needlework, and they by that means acquire situations and positions which they would not otherwise be able to fill and occupy. I now beg to call upon Lord Lorne to read the paper which he has been so good as to undertake upon Canada.

Education in Canada

The Marquis of Lorne

I am ashamed to confess that I have not prepared a paper, thinking that in all probability there would be little time for you to listen, except to some general remarks upon the subject of education in the colonies. I think we are very greatly indebted to Lady Warwick for having called this Congress together, because in all matters connected with the colonies what we are most anxious to encourage is emigration from England to those States in alliance with ourselves which we call in the meantime 'colonies.' One of the first requisites to encourage emigration is that the ladies in England should be able conscientiously to recommend emigration from our shores to those further shores for all who cannot find an adequate competency here, or who may think that their own lives and the lives of their children are likely to be bettered by settlement in other lands. It is necessary for this purpose to show that they are not going to enter savage and outlandish parts, and that in transferring themselves from this country to other countries they will find all the comforts—all the luxuries indeed—of civilisation ready to their hand, and that, in regard to their children, they will find an education easily attainable and equal to that which they may have at

home. As has been well said, the colonies have had many advantages over the Mother-land, inasmuch as they have been able to proceed very much upon a blank sheet. They have been able to build up from the ground, whereas our architectural educationalists have had to accommodate themselves to the structures formerly raised, and to which it has only been possible in this country to add bit by bit and piecemeal. I shall confine the few words with which I have to address you to the subject of the education provided by the State in two representative colonies—namely, in New South Wales, and in the great Dominion of Ontario. You know that in regard to New South Wales, which has been called the Mother Colony of Australasia, you have there a population of a little over one and a quarter million, very English in tone; and in regard to our British provinces in America, you have in the great province of Ontario a population of 2,000,000, also most representative of Englishmen, Scotchmen, and Irishmen. Therefore those two colonies may be taken as good samples of that education which is so very generally provided, and you must not think that, in selecting those two, the others are inferior, because they are very fair samples of the education to be had at large. I think you will agree, after hearing the few remarks I have to make, and after looking at that pamphlet[1] which has been very generously distributed by the Dominion Government in regard to Ontario, that you may be perfectly safe in saying to anyone—any farming family or other family—that wishes to move across the Atlantic or to the Southern Hemisphere, that their children will have a most excellent education.

[1] A few copies of this pamphlet kindly forwarded by the Minister of Education can still be obtained from the Sub-editor.

Now first with regard to New South Wales. According to the last reports—and I take my information from a paper contributed in 1896 and the various Government statements by Mr. Morris—only seven per cent. of the children of the colonies could *not* read or write. That is to say, the network of education had overtaken 93 per cent. When you think that this calculation includes Polynesians, Chinese, and others, who may have been for labour purposes brought to Australia, I think you will acknowledge that 93 per cent. is an enormous percentage of those who can read and write. Let me go for a moment into a few facts in reference to this. In New South Wales buildings are put up and kept in repair by public money, the teacher is paid wholly by the Government; the fees, which are reduced to only 3*d.* per week, are paid into the Consolidated Fund of the colony. Lord Loch mentioned that as a rule the education was compulsory, and it is so in New South Wales. All children must attend between the ages of six and fourteen, 140 days in the year, unless they are otherwise receiving instruction, or live too far away or give some good reason for their absence from school, to the Minister of Education. Of course Public Schools of the 1st and 2nd and 3rd classes are divided into three departments—one for boys, one for girls, one for infants: the kindergarten system prevailing, The 4th class school has two departments, one for boys and the girls and one for infants; and so on down to the smaller schools. With regard to the teachers, a great deal of care is taken that they shall be adequate to their work. In order to be eligible they must hold certificates of competency according to a scale of acquirements. All promotions in status from class to class are made as the result of a twofold test—namely, attain-

ments supplied by means of a written examination, and a practical test by an inspector, who estimates the candidate's ability for teaching by demonstration, the candidate being required to teach before the inspector in a school. Promotion may be secured for these teachers after five years according to the inspectors' report of their qualifications. They have an elaborate plan of securing good pupil teachers,[1] they compete for scholarships which admit to training schools, and each pupil teacher receives instruction for one hour each day from the head-master of the school to which he or she may belong. This is, of course, in regard to Elementary Schools. Now with respect to High Schools for boys and girls; these are established in four of the chief towns of New South Wales. The curriculum completes the training received in the Public Schools, and prepares very thoroughly for a University course. In regard to Technical Education, there again they are quite up to date, the departments comprising agriculture, training in the practice of farming, sheep and wool, chemistry and metallurgy, pharmacy, mineralogy, geology, mining, mechanical engineering, electrical engineering, applied physics, mathematics, sanitary engineering, architecture, art, industrial and decorative art, domestic cooking and economics, lithography, dressmaking and manual training. There is a large University also at Sydney with affiliated Colleges—Church of England, Roman Catholic, and Presbyterian.

Now one word in regard to denominational schools in New South Wales. The Government grant was withdrawn altogether some time ago from denominational schools. In spite of that grant having been withdrawn, relying entirely upon their own constituents,

[1] See p. 28.

there are 285 Roman Catholic schools with over 1,450 teachers and 27,000 pupils. The Church of England has 62 schools, with 246 teachers and 2,600 pupils. These receive no State aid. The University examinations show that they are very well conducted. There are five separate Colleges also instituted, and an hour daily is set apart in all schools for religious teaching in a separate room. So any clergyman, Roman Catholic or otherwise, can ask that after the four hours of secular education in the elementary class are over, children belonging to his church shall follow him into an adjacent room, and shall there receive an hour of religious instruction. There is one other point which I must mention before I leave the subject of New South Wales, and go to that of Canada: and that is the fact that Savings Banks have been established in connection with the schools, so that the boys and girls may be persuaded to put their pence or their shillings into these Savings Banks, whereby a very practical form of thrift and economy is inculcated.

I shall now go to the great province of Ontario. In mentioning Ontario, and the liberality of the methods employed to help not only the common schools, but also the separate schools, I may add that in the important French-speaking province of Quebec the liberality is, if possible, even greater. I remember being very much struck by an offer made in regard to a Protestant who happened to be in a prison at Quebec. An offer was made on behalf of the Provincial Government that a Protestant chaplain should be sent at the expense of that Government in order to minister to the wants of this prisoner. That shows the tone and the temper of the Provincial Government in Quebec in regard to these matters. In regard to any Protestant denomination

which wishes to have a separate school in the Roman Catholic province of Quebec, facilities are always given for a certain amount of public aid in order to assist such separate Protestant school. In Quebec, as you know, the majority is Roman Catholic, but the reverse is the case in Ontario, where the majority is largely Protestant, and there they have so excellent a system of common or of public schools that I think the last statistics show that the separate or denominational schools are rather on the wane. Protestants, I know, in Montreal, for instance, are often in the habit of sending their girls to Roman Catholic convents for education, so sure are they that proselytism will not be carried on, and I think the number of Roman Catholics in Ontario who now send their children to the common schools is increasing, and separate schools in that province are rather diminishing than otherwise in number. The general system is one of what is called 'common schools;' that is, each district, small or large, has its own public school under the governance of trustees. These trustees are formed into a body corporate, and they have the responsibility of all the management of that school; State aid—that is, aid coming from the provincial treasury—coming only in the form of subventions to the money raised locally by the education district, whether it be a county council district or whether it be a smaller unity of a township district. The Government say in their Public Act that all children shall be educated, that all public schools shall be free schools, that pupils are not to be required to observe religious exercises objected to by parents, and that they shall be allowed to receive religious instruction as their parents desire. The schools are all under trustees, and the municipal councils may assess for salaries. Good teachers are secured by a most

excellent system of 'normal schools'—that is, by training colleges. There is a large superannuation fund for teachers to which they themselves are bound to contribute. The inspection is very good, and the inspectors have the onerous task of distributing (unless otherwise instructed by the Minister of Education), among all the school sections, their respective portion of the public school fund apportioned to or raised by the county rate, according to the ratio of average attendance. Then there is one excellent plan with regard to getting public approbation for schools and an adequate supervision without unnecessary interference, and that is by the appointment of Visitors, both in regard to the common schools and in regard to the separate schools.[1] Almost every man who has gained any distinction whatever in public life in the province is made *ex-officio* a Visitor of both classes of schools. For instance, all clergymen, all judges, all provincial parliament men—M.P.P., as they say there—all county councillors, and all aldermen shall be Visitors of all schools both public and separate. You see what a good plan this is. Everybody can come in who is a man of any mark, and yet they neutralise each other, and if there is one fussy Visitor who makes objectionable remarks there are always a dozen other more sensible Visitors to keep him in order. I think that is a most excellent plan and one which we might very easily copy here. Then in regard to the legislative grant. It is only for salaries, and the fund, as I have said, must be met by an equal local contribution. There are many collegiate institutions in the province of Canada, and there again the administration of the finance of those is managed very much upon the same

[1] See p. 311.

lines as the assistance given to the Elementary Schools. There is a most excellent University at Toronto, and in order to show the Imperial feeling which exists between our country and our North American provinces, I may mention that some time ago the Toronto University library was burnt down, and a committee was formed in London, upon which I had the honour to serve, and in a very short time—I think three or four months—we had replaced the library of over 30,000 volumes which had been destroyed, by another fully as good, contributed not only by Great Britain and Ireland, but also very generously by some Continental countries. I think you will have the advantage of hearing other views—the views from Australia upon Australian education. I have said enough to assure you that education is most jealously guarded and most zealously looked after in our great possessions. You may, with a perfectly happy mind, inform anyone of your acquaintance that, if they go to either of these colonies, their children in this respect will by no means be neglected.

Sir William Windeyer, Ex-Chancellor of the University of Sydney, was now called upon by the Chairman to read his paper on the Higher Education of Women in New South Wales.

The Higher Education of Women in New South Wales

Sir William Windeyer, M.A., LL.D.

The perception of the truth that woman as a human being has the right to win any position in our social system to which her ability and energy entitle her to aspire, and that the exercise of her right is a gain to humanity, is one of the most remarkable advances in our conception of a complete social system which has been made during

the great and happy reign of our Sovereign Lady, the celebration of which has brought us together in this Congress. Outside the sphere of material prosperity it will undoubtedly be regarded by the future philosophic historian as one of the most conspicuous indications of the progress made by us as a race throughout the world. I say as a race, because I think the idea has been more widely accepted amongst our race, whether in England, America, or in the British Colonies, than by the people of any other country. It was a happy thought, therefore (and one for which I think you will agree with me that the Noble Lady who presides over our Congress and her helpers are entitled to all praise), that during these public celebrations, when, with glad national rejoicings, we are taking stock of our gains during the last sixty years, we should take note of this new asset. It has done so much to elevate and refine society, and to complete the emancipation of women from the thraldom of social systems which more or less rigorously, in all past time and in all countries, have regarded women simply as chattels existing for the benefit of men, rather than as rational beings constituting half of humanity, with every right to the full enjoyment and development of their faculties which is possessed by the other stronger half.

Requested by our Lady Chairman to give the Congress some account of the efforts made in New South Wales for the higher education of women, I have undertaken the task with some doubt whether I could do so in a thorough manner, removed as I am from officially accurate sources of information, but still trusting that what I have to say on the subject may be of interest to you.

It might hardly be expected that in a young country

like Australia, whose people are primarily engaged in the work of subduing the earth, and in creating the material prosperity which is the foundation of all national, intellectual, and spiritual advancement, much time could be devoted to the development of ideas which are to be found flourishing in countries more advanced in social progress. It will be pleasant for an Australian who has been invited to speak concerning what has been done for the higher education of women in the mother colony of Australia during her Majesty's reign, if he is able to show that the perception of the truth that has dawned on the world as to this right of woman to have afforded her the same means of developing her mental faculties as is afforded to men, has been already recognised in New South Wales.

It is a gratifying indication, I think, of that community of thought between the home-keeping people of England and those who have gone to the uttermost parts of the earth, and are there helping to build up the wealth and power of Britain, and of that Imperial federation of thought and sentiment upon which, rather than upon any cunningly devised Constitution, the possibility of a united and federated Empire depends. Standing upon the same plane of thought, and consequently of morals, speaking the same language and inspired by the same noble literature, with a common inheritance in the traditions of a great nation, let us strive that this vision of the British people federated throughout the world may have such help given to its realisation as may be afforded by the education of our women to be in all things worthy helpmates of the men of our Imperial race.

The scheme of public instruction in New South Wales contemplates a graduated system of teaching by

which a boy or girl of marked capacity may proceed from the primary State schools of the colony (which answer to the Board Schools of England) to the University. Carrying out this idea, the Legislature, after the passing of a Resolution, which I had the honour to submit, in favour of such a course in the Legislative Assembly, established High Schools for girls in Sydney, and at Maitland and Bathurst, our two principal centres of population. In these schools an education is given which fits the pupils for matriculation in the University, the course of instruction being of the class ordinarily given in a sound course of secondary or grammar school education. Unfortunately the Report of the Minister for Public Instruction for 1896 has not yet reached England, and I can only give the figures for 1895, when the number of girls attending these schools was 305, 208 of whom were at the Sydney school.

A number of the pupils go up every year for the public examinations conducted by the University of Sydney, which are similar to the middle-class examinations conducted by Oxford and Cambridge Universities. A certain standard of proficiency attained in these examinations qualifies the pupils for matriculation in the University, and in 1895 forty-six girls reached it. The examinations are for senior and junior pupils, the papers set for the senior pupils being of a far more difficult character than those set for the juniors, the passing of the senior examination giving a stamp of efficiency to the successful student, only second to a University degree, and intended to give an educational hall-mark of value to students who, unable to give their whole time to study in a University course under professorial training, are yet able to give such proof of their

educational proficiency as merely passing an examination implies.

In 1895, forty-six girls matriculated, twenty-one qualifying at the junior and seven at the senior examinations, the remainder passing the special Matriculation examination of the University. Medals were awarded to High School girls in the junior examination for proficiency in English history, arithmetic and algebra, the pupils apparently not being so proficient in the higher branches of education. The schools are maintained partly by State endowments and partly by fees paid by the pupils, the cost to the State being at the rate of 5*l.* 14*s.* 2*d.* per head yearly and to the pupil 12*l.*

Carrying out the system by which boys and girls can rise from the public Elementary Schools to the High Schools and from them to the University, a scheme of scholarships and bursaries has been instituted by which a certain number of successful but poor scholars can be promoted from the Public Schools to the High Schools and from them to the Universities. It is interesting to note that the number of girls winning University bursaries was more than proportionate to the number of boys.

Besides the provision made by the State for the education of girls in secondary schools, some efforts have been made in the same direction by several of our religious denominations, notably by the Presbyterians, who, ever true to Scotland's love of learning, have established a very efficient Presbyterian Ladies' College. Some of our private schools, too, of a high class have been very successful in turning out pupils who have distinguished themselves at the University, all the private schools in the colony being kept up to a certain

standard of efficiency, by the public examinations of the University, which are held simultaneously all over the colony. This provokes a keen rivalry between schools, and affords an excellent method of testing the efficiency of private teaching; it also gives a stimulus to individual exertions of the most healthy kind.

Women coming to the University of Sydney will find there all the equality of advantages with men for the prosecution of their education and the full enjoyment of whatever rights and privileges University membership can give, which the most ardent of our English University reformers promoting the co-education of men and women can desire. With no semi-monastic traditions to hamper them in the management of their University, with no College system usurping University control, and fearless of the competition of earnest-minded women bent on making their University life something more than a pretence of putting on that very thin veneer of education which a mere pass degree represents, the Senate of the University of Sydney in 1881 passed a resolution admitting women to all its educational advantages. Since that time women have been admitted to its degrees precisely on the same conditions as men. In 1884 the Legislature of New South Wales, adopting the views of the University, and to secure as a right for the women of the colony for all time, and beyond the possibility of doubt, the privileges accorded them by the Senate of the University, passed a measure enacting that 'the benefits and advantages of the University, and the provisions of the Acts relating thereto, shall be deemed to extend in all respects to women equally with men.' The effect of this Act was to give women, on the same conditions as men, a voice in the control of the Uni-

versity, by allowing them, like competent male graduates, to take part in the election of the Senate, the Governing Body of the University. I am glad to think, as a graduate of the University, that neither the Resolution of the Senate to grant women the degrees which they had fairly won in open competition with men, nor the Bill proposing to confer on women the full privileges of University membership, was received with any unseemly demonstrations of ignorant prejudice, but with an acclaim of approbation by our Australian undergraduates, who, ever since the introduction of the reform, have on all public occasions given hearty expression of their good-will and kindly *camaraderie* in their common pursuit of learning to their sister undergraduates, the most vehement applause at our commemorations at all times greeting the woman who distinguishes herself by taking prizes and honours.

The threadbare phrase that women should keep their place, as some are pleased to call the position of registered inferiority to which so many men, with assumed superiority, relegate women often superior to themselves in all that gives dignity to character, we are thankful to say finds no voice amongst us as an argument against the educational enfranchisement of women, and has entirely disappeared before the nobler view that woman is entitled to the place which her God-given talents enable her to win. The University of Sydney has indeed the honour of being amongst the first of British Universities to solve the problem of co-education of men and women, who are there all taught together in the same lecture-rooms.

With a long and intimate acquaintance with the working of the University—first as an undergraduate,

and for thirty years as a member of its Senate, sometime its Vice Chancellor, and latterly holding the office of Chancellor—I have no hesitation in saying, as said too my predecessor in that office, that our system of co-education has worked well and is heartily approved of by our professors, who are the persons most closely brought into contact with the undergraduates, and are in the best position to give judgment on its working. It certainly has not had with us the disastrous effect of destroying the manly tone of the male undergraduate, an imaginary evil which seems to be much dreaded by some opponents of mixed Universities in England, and which is so solemnly predicted with all the assurance of those who disregard the experience of countries in which the system exists.

Our football team still holds its own as the champion team of the colony, while cricket and rowing have as numerous votaries as ever. We do not consider our 'Quad' desecrated by the graceful presence of those who on its tennis lawn compete in healthy recreation with the men, with whom in many an intellectual contest they run close races in its surrounding lecture-rooms. Anyone who has had the opportunity of observing the working of the system, and who has had the means, through sons passing the University course, as I have had, of judging of the effect of allowing our young men and women to work together in their studies, will agree with me in thinking that it is entirely healthy to the character of both. The sexes reciprocally give something of refinement and something of strength, whilst a natural and truly appreciative understanding of each other takes the place of much sickly sentimentalism, and the false ideas too prevalent amongst young people who are not

allowed to meet under conditions which enable them to gain that insight into the real character of the opposite sex, both in the mass and in the individual, upon which so much of happiness in after-life depends.

Some cynic has, I believe, said that it takes two generations to effect any reform in England. Doubtless the gentleman who said that lived at a time when only men were the reformers, and the other half of humanity had no voice even in matters that concerned their dearest interests. He had not lived to see the time when men and women worked together for the betterment of the race. No one will be sneered at now-a-days as a bold prophet who ventures to predict that the time is fast approaching when a one-sex University will be regarded as no less obsolete as an ideal centre of intellectual life than monasteries and nunneries are of a religious life. No really valid reason has been advanced why Colleges for women who are allowed to take the degree which they win should not as safely co-exist in the same University with Colleges for men as they do now when a degree is denied them; nor is there, as far as our experience goes, any well-founded reason for thinking that women would attempt to interfere with matters of discipline affecting men, or as a body would attempt to control the government of the University in a one-sided way. With us they certainly vote for the best candidates for the Senate, and no fear is entertained that their influence in the University will ever be detrimental to its interests.

Still further recognising the duty of the State to place women on equal terms with men as to educational advantages, the Legislature of New South Wales in 1890 passed an Act for the establishment of a College

for Women affiliated to the University of Sydney, the College being, as far as I have been able to discover, the only College for Women in the Empire which is recognised by statute as part of a State University system.

The sum of 5,000*l.*, the amount necessary to secure an equivalent grant from the Government, was raised by public subscription by the beginning of 1891, and in December 1891 Miss Louisa Macdonald, M.A., of the University of London, was appointed the Principal of the College, where her ability and success have brilliantly justified the selection made for the College Council by the heads of Girton, Newnham, Lady Margaret and Somerville Colleges, to whom, for their valuable advice and ready assistance in the matter, the Women's College within the University of Sydney is much indebted. The work of the College was carried on in leased premises till 1894, when the College buildings, erected at an expense of over 14,000*l.*, were completed and formally opened by Lady Duff, the wife of the then Governor, in the presence of a large number of subscribers and friends of women's education. The College as it now stands contains a large dining-hall, library, students' common-room, class-room, visitors' room, and study-bedrooms for twenty-six students, besides the Principal's rooms, and accommodation for a staff of servants. The grounds have been laid out with one asphalte and two grass tennis-courts, and have been planted with trees and shrubs, the College being pleasantly situated on a portion of the 1,000 acres of land originally granted by the Crown for the purposes of the University in the neighbourhood of the Church of England, Presbyterian and Roman Catholic Colleges for Men, also affiliated to the University. According to the

Act of Incorporation, 53 Vic. No. 10, 'The Women's College is a college in the University of Sydney, wherein may be afforded residence and domestic supervision for women students of the University, with efficient tutorial assistance in the preparation for University lectures and examinations. All students in the College, not already matriculated, shall, as soon as shall be practicable, matriculate in the University, and shall be required duly to attend the lectures of the University on those subjects, an examination and proficiency in which are required for degrees, with the exception, if thought fit by any such student, of the lectures on Ethics, Metaphysics and Modern History.'

The College is strictly undenominational, the Act of Incorporation providing 'that no religious catechism or formulary which is distinctive of any particular denomination shall be taught, and no attempt shall be made to attach students to any particular denomination, and that any student shall be excused from attendance upon religious instruction or religious observances, on express declaration that she has conscientious objections thereto.'

Those unacquainted with the working of unsectarian educational institutions may be interested in hearing that no difficulty has arisen, or appears likely to arise, either on the Council of the College, of which I had the honour to be the first chairman, and which included Roman Catholics, Church of England, Presbyterian and Congregational representatives, or with regard to domestic religious observances; morning prayers, at which students are expected to be present, except those having conscientious objections, being willingly attended by Protestants of all denominations.

A fee of 21*l.* for the lecture term, of which there

are three during the year, covers all college dues, including fire and light, as well as tutorial assistance in classics, classical history and modern languages. The salary of the Principal, 500*l.* a year, is paid by the State, which gives no further endowment. The College provides all necessary furniture, but every student may arrange and add to the furniture of her room as she pleases. The students of the College have been very successful at the University, taking honours in various schools, one student being the first for many years of all the students in the University to take first-class honours in the school of history and philosophy with second-class honours in Latin.

The foundation of our High Schools and of the Women's College as affiliated to the University by the Legislature, with the admission of women to the full privileges of University education, may be fairly said to give New South Wales some claim to recognition for the efforts which she has made to further the higher education of women, influenced by the nobler spirit of the time, so finely voiced by our 'dear dead' Laureate, in words that one would not willingly let die, touching as they do every chord of sympathy between man and woman:—

The woman's cause is man's: they rise or sink
Together, dwarf'd or godlike, bond or free:
For she that out of Lethe scales with man
The shining steps of Nature, shares with man
His nights, his days, moves with him to one goal,
Stays all the fair young planet in her hands—
If she be small, slight natured, miserable,
How shall men grow? but work no more alone!
Our place is much: as far as in us lies
We too will serve them both in aiding her—
Will clear away the parasitic forms
That seem to keep her up but drag her down—

Will leave her space to burgeon out of all
Within her—let her make herself her own
To give or keep, to live and learn and be
All that not harms distinctive womanhood.
For woman is not undevelopt man,
But diverse: could we make her as the man,
Sweet Love were slain: his dearest bond is this,
Not like to like, but like in difference.
Yet in the long years liker must they grow;
The man be more of woman, she of man;
He gain in sweetness and in moral height,
Nor lose the wrestling thews that throw the world,
She mental breadth, nor fail in childward care,
Nor lose the childlike in the larger mind;
Till at the last she set herself to man,
Like perfect music unto noble words;
And so these twain, upon the skirts of Time,
Sit side by side, full-summ'd in all their powers,
Dispensing harvest, sowing the To-be,
Self-reverent each and reverencing each,
Distinct in individualities,
But like each other ev'n as those who love.'

WILLIAM WINDEYER.

Education in New Zealand

The Chairman.—In introducing to you the Honourable W. P. Reeves, I beg to announce that he was formerly Minister of Education in New Zealand.

The Hon. W. P. Reeves

I shall speak to you only about education in the colony of New Zealand, and time will only permit me, I am afraid, to give you the dry bones of what is an interesting institution. It is interesting because, in the first place, I think it may lay claim to being very successful, and, in the second, because it is entirely a State institution from top to bottom. It is very successful, although the census statistics of New Zealand appear to show that

over 16 per cent. of the population are illiterate. A gentleman came into my office the other day rather staggered by that statement; but on looking into the figures it will be found that three-fourths of this 16 per cent. are children under five years of age, and of the remaining portion two-thirds are children under ten years of age. So that the number of persons who cannot read or write in New Zealand is, I am thankful to say, very limited; and of those nearly all arrived in the country after coming to man's estate. Then, although the education system in New Zealand is almost entirely a State one, it must not be supposed that it shows the features which are usually associated with a State system. When you hear that a system is governmental you are disposed to conclude that it is highly organised, and that it shows a level of uniformity, and that its administration is centralised. Now none of these things are quite true with regard to the New Zealand education system. I suppose that, instead of being centralised, it is probably one of the most decentralised State systems in the world. To understand that you must look at its history, which is, after all, simply a reflex of the geographical conditions of the colony and the way in which settlements grow up there. New Zealand was colonised not from one centre, but from many distinct centres. Little bands of settlers landed here or there upon its coasts. The country, it is true, is not quite so large as the British Isles, but it is 1,100 miles long, and it is cut asunder in different places by arms of the sea, by ranges of Alpine mountains, by a forest that is peculiarly difficult to penetrate, and by mountain torrents which are in places impassable. The result is that for many years the different settlements of New Zealand were cut off

from one another, and the education grew up in accordance with the ideas and the capacities of the settlers in different places. After a time had passed the central Government was sufficiently powerful and the colony sufficiently developed for Parliament to step in and endeavour to organise these many piecemeal ideas of education into one harmonious whole; but so jealous were the localities of the central Government that even now nearly the whole administration of education in New Zealand is carried on by local bodies, and the powers of the Minister of Education in the central department are very closely and rigorously defined and circumscribed. A New Zealander, referring to his education system, would tell you, certainly with emphasis and in most cases with pride, that it was a free, secular, and compulsory system. All those statements must be taken with limitations, because education, of course, is not a mere matter of teaching. In the common schools there are three degrees of education—primary, secondary, and University. Now, the University of New Zealand is neither free nor compulsory; it is secular. The secondary schools are neither free, secular, nor compulsory. It is only in the common schools that you find a free, secular, and compulsory system prevailing, and even there the system is not entirely free, because the school books are not supplied to the children gratis; they have to be paid for by their parents. But in the main, I suppose the system, at any rate the primary part of it, is as near an approach to a free, secular and compulsory system as you will find anywhere in the world, certainly in our Empire. In spite of the fact that it is secular, and likely to remain secular, the statistics of crime in the information that we have about the moral condition

of the population of the colony are very favourable. The result is that whatever differences of opinion may have existed in New Zealand upon that point as to the advantages of a scheme largely of religious education, there appears at the present time no likelihood of the existing system being changed. On the contrary, for many reasons it is regarded by the people with great admiration and with the utmost possible affection; I should not like to be the statesman in New Zealand who was identified with any hostility to the national system of education.

The Minister of Education in New Zealand decides, subject to statute, what shall be taught; but when it comes to the teaching thereof, that is carried out by a variety of boards and local bodies. The University of New Zealand is entirely controlled by its Senate, upon which the Minister of Education does not even have a seat. The secondary schools scattered about the colony are controlled by boards of governors. Some of them are elected by various bodies, some are nominated by the Minister of Education, some were appointed long ago by statute and fill up any vacancies that occur in their own ranks. The result is that the secondary education system of New Zealand is quite the reverse of uniform. The Government of the colony has nothing to do with it except to inspect it, but while it presents a charming diversity, it is, on the whole, the least satisfactory and least complete branch of education that the Colony has to show. When you come to the common schools, the primary education, there you will find a great variety of local bodies. The colony is divided into thirteen districts, and over each of these districts is placed an education board, elected by smaller bodies called the school committees; the

school committees are little bodies chosen by the parents and residents or neighbours of the school to attend to minor matters connected with the school. Instead of having those numerous visitors referred to by Lord Lorne [1] as one of the bulwarks of the system in Canada, we go to work by delegation. Instead of all the influential people of the country being visitors of the schools, the people near the school who take an interest in the working of it meet together and choose a small committee of nine people to attend to the school and watch the master and see that everything is done decently and in order. But the real administration of education is carried on by the thirteen large boards throughout the colony. They have nothing else to do except to attend to the education; they are not mixed up with other local bodies in any way whatever, and on the whole they do their work extremely well.

The whole cost of education is found by the Colonial Treasury; there are no local rates or taxes or contributions of any description; Parliament votes an annual sum for education, and according to a scale the whole of that is distributed by the Minister strictly in accordance with statute; he cannot add 1*s.* to or take away 1*s.* from what is called the Capitation Grant—that is to say, for every child who attends school regularly the education board of that district receives 3*l.* 15*s.* There is another sum, which the Minister may add to or diminish, which is handed over to the boards for the purpose of erecting and maintaining schools, and there is a much smaller sum which is handed over to the boards for the purpose of distribution in scholarships. The whole cost of primary education in New Zealand is something over half a

[1] See p. 294.

million, and when you recollect that there are only 760,000 people in the colony, you may see that they are not niggardly in supporting their own school. As I said, there are no local rates, no fees, and no contributions to the common schools; but do not let it be supposed that the mass of the people in the colony are getting something that they do not pay for. Owing to our system of direct taxation everyone in the colony, even the poorest, contributes fairly to the exchequer; in fact, the contribution of a married working-man with a family is considered by some economists to be unfairly large; therefore anything such a man gets out of the State system in the way of education for his children he pays for amply.

In addition to the University, secondary schools, and common schools, there are special schools for the children of the Maori or native race. They are not under the administration of the local boards, because the Maoris very strongly object to anything of the kind; they desire that their schools shall be controlled only by the central Government, or, as they call it, the Queen's Government. But they elect their own little committees to look after the schools, and very interesting it is to see these committees of brown-skinned semi-barbarians meeting together to discuss educational matters and showing a very keen and very lively interest in the welfare and prosperity of their schools. I am happy to say that one of the brightest features in the outlook for the native race in New Zealand is that for some years past the attendance of native children at the public schools has been steadily increasing. In addition to that, we are not only trying to teach them literature, but to give them some idea of rudimentary medical and sanitary science;

and in that way we hope to arrest that decline of the race which has caused to the minds of people in New Zealand so much regret for many years past.

Passing from the native schools, you come to the industrial schools, where destitute and criminal children are trained and educated. Just a word about these schools. The industrial school system of New Zealand has one or two distinct advantages. One of these is that when a destitute and criminal child is committed to one of these schools he is not released from control until he is twenty-one years of age. The result is that the Minister and the inspectors are able to watch the children when they have really ceased to be children, and have become lads and girls and when they are going out into life, and if they see that they are getting into bad hands they are able to recall them and put them into better hands and into a better way of living. In addition to that, what is called the boarding-out system is pushed very far with us. Out of some 1,050 children in the Government industrial schools, about 820 are at the present moment either boarded out or apprenticed out, and that by experience is found to be not only a much more humane, but a much more satisfactory, method of dealing with these poor children than keeping them in barrack-like edifices which may be erected in the middle of towns. There are also, of course, private industrial schools inspected by the State but kept going by religious denominations, or, to be correct, by one religious denomination—the Roman Catholics. The Roman Catholics do not like to have their children sent to the State schools, even their neglected and criminal children; they prefer to support them in their own schools, and they are allowed to do so on condition that their schools are inspected

by the Government inspectors. The Government pays for the cost of the children in the individual schools, and they are very satisfactory schools indeed, with one exception, and that is that they do not board out and apprentice out children to anything like the same extent that Government schools do; they prefer to keep them within their own walls. That, at any rate in my opinion, is not a satisfactory feature; otherwise the schools are very well conducted indeed.

Then in New Zealand there are two schools conducted by the State, one for deaf mutes, and the other for the teaching of the blind, and as far as they go on their small scale we have every reason to believe that they do their work very well.

Now, to return for a moment to the University of New Zealand. As Sir William Windeyer was able to say with regard to the University of New South Wales, so am I proud and happy to say of that of New Zealand, that from the first it never drew any distinction whatever between young men and young women. The only difference in our case was that our University Senate never thought it necessary to pass any resolution whatever; it simply proceeded from the very first on the quiet assumption that no difference could possibly exist from a University standpoint between boys and girls, lads and maidens. The girls were admitted from the first to all the privileges of the University; and it is very difficult indeed for a New Zealander to imagine that there could be any objection to a system which seems so natural and which has worked in such a thoroughly satisfactory way. For the rest, I would say that the girls take full advantage not only of our University system, where many of them take their degrees, but of our secondary system, where they

number two-fifths of the total number of pupils—in fact, rather more—and of our primary schools system, where they are almost as numerous as the boys as pupils. In fact, the proportion now in the State common schools is 51·2 boys to 48·2 girls; the boys are only 3 per cent. more numerous than the girls; and you must remember that there are more males than females by many thousands in New Zealand—it is not there, as it is here, where the females largely exceed the males in the population. The University of New Zealand is simply a paramount examining body, with three well-equipped affiliated Colleges. Like the rest of our education system it is highly decentralised. You do not see these Colleges in one town, but they are scattered in different parts of the colony far away from each other—three of them in three of our four principal towns. One of the blots of the system in New Zealand is that the capital of the colony, Wellington, one of the four chief towns, has no University at all. Its residents keenly feel it, and I hope that before many years pass that reproach will be removed. For the rest, of course it is all upon what seems to you a very small scale. The number of degrees that have hitherto been granted in New Zealand are only about 600; the number of undergraduates at present attending the New Zealand Colleges is only between 600 and 700, but I can assure you that the instruction given is thoroughly efficient. So determined is the University Senate that the instruction should be efficient, and that the degrees should be really equal in value to those granted at any University in the Empire, that nearly the whole of the examining for degrees is done by gentlemen of high scholastic attainments in England. The New Zealand Univer-

sity Senate will not take its examination from its own New Zealanders; but the papers are drawn up in England by well-known gentlemen; they are sent out under seal to New Zealand; the answers are written there, and the papers sent home under seal to England again, and they are treated here exactly as though the examination had been held in England. The result is that our degrees are recognised all over the Empire except in the one University of London, and I believe they fully deserve to be so recognised.

I said just now that the secondary school system in New Zealand was the least satisfactory of our branches. Yes, that is so. Not that the teaching is not good, but that it does not go far enough. There are only about 2,500 students in our secondary schools, and the proportion of secondary school children to primary school children is only 1·93—a little less than 2 per cent. That is not a record to be proud of in an advanced democratic colony like ours. The only thing to be said is, of course, that the raising of this proportion must be largely a question of finance. We spend liberally on our national education already, but we shall spend more liberally as the time goes on; but just at present I do not think we can afford to make the secondary schools free, and therefore to open them to all classes, even the poorest. A good deal is done in the way of scholarships already, because out of the 2,500 students at the secondary schools I suppose between three and four hundred of them hold scholarships or get free education for them.

Now for our primary school system, of which we are proud, and I think justly proud. Just let me mention before I get to it that the total number of children and youths receiving education in New

Zealand at the present moment is probably as near as possible 162,000, and that, as you will see, is rather over 20 per cent. of a total population of 760,000. The primary school children educated by the State number 134,000, the native school children number about 4,000, and the children in private schools not in any way supported by the State are rather fewer than 15,000. Before I pass from the private schools, let me say that they are not subsidised or supported by the State in any way whatever. Out of the somewhat less than 15,000 children in private schools, about 10,000 belong to one denomination—the Roman Catholics. The Catholics in the colony regard it as a distinct grievance that they are not subsidised or helped by the State in any way, and, as far as they can, they bring that grievance before Parliament by united action at the ordinary elections; but so far they have not been successful in increasing their supporters in Parliament, or in getting any nearer to the redress of their grievance. On the contrary, I should say that the voting in Parliament on a question of grants to denominational schools would at the present moment be fully four to one in favour of the maintenance of the present system, and I do not see any probability of that balance being altered. For the rest, the private schools are, I believe, good schools; the Government helps them in no way, but they sometimes at their own request are inspected by the Government inspectors. Their children, too, are granted free passes on the railways to go to school, if they live more than three miles away from the school, because the railways in New Zealand are owned by the State.

As I have shown you, about nine-tenths of the young children in the colony are educated in the

primary schools. Of the teachers nearly one half are women, and the proportion of women to men is increasing. I wish I could say that the women were as highly paid as the men, but they are not, and it is a distinct injustice. At the same time, as compared with the scale of payment to teachers in other countries, they are not badly paid. Even if you include the whole of the pupil teachers and the sewing mistresses, who only work part of their time, the average salary paid to each teacher in New Zealand is 94*l.* 10*s.* If you exclude pupil teachers and sewing mistresses, of course the average is much higher, and, as there are scarcely any teachers who are paid more than 400*l.* a year, you will see that the average is high enough to enable them to live decently. In nearly every case the teachers are provided with residences, and they are banded together in a national union which goes by the clumsy name of 'The Educational Institute.' This Educational Institute is expressly recognised by statute, and it has a good deal to say both to the Central Government and to the local boards upon the administration of the education system. In addition to that, by Act of Parliament every teacher is entitled to reasonable notice before his services are dispensed with, and if he is suddenly dismissed on any serious ground affecting his character, he is entitled to appeal to a tribunal set up by the central department. So that something is done to secure common justice to State teachers in our part of the world. As for the kind of education that is given in our common schools, the following subjects are taught: reading, writing, arithmetic, English grammar and composition, geography, history (we do not exclude history in New Zealand: they used to do so in Victoria) elementary science and

drawing, object lessons, vocal music, and, in the case of girls, sewing and needlework, and the principles of domestic economy. Provision is also made for teaching the boys drilling. Now with regard to needlework and domestic economy; the needlework is very well taught indeed: the domestic economy is more or less well taught, it is taught very well in some districts and not taught at all well in others. Our system, as I said before, is highly decentralised, and that means that some districts will lag behind others; but you cannot expect a standard of uniform excellence. On the other hand, of course it gives great vitality and causes a great amount of emulation between district and district; and it brings the people in all parts of the colony into very close touch with their system of education, and has a good deal to do with the esteem and affection with which they regard it. The one great blot in our common school education is, in my opinion, the almost entire absence of technical teaching, properly so-called. Drawing is taught universally, and taught very well indeed. It was made what is called a 'pass' subject—teachers will know what I mean—about eleven years ago, and there was a great deal of grumbling on the part of teachers. No doubt it worked rather harshly at first, and I remember, when I took office in 1891, the teachers exerted themselves very strongly to induce me to take off drawing from the 'pass' list, and make it merely a 'class' subject. But I refused to take it off, and, sure enough, as time has gone on the teachers have grown accustomed to it, and the drawing is very well taught indeed now, and the teachers have ceased to complain that it causes them any hardship. Drawing, of course, is a foundation and basis of technical educa-

tion, and, as far as that goes, our children get the basis of technical education. Sewing, I presume, you may also call a part of technical education; but for the rest the technical education in New Zealand leaves a great deal to be desired. I did succeed in getting Parliament to adopt a a very timid and tentative Technical Education Act about three years ago, but it was left to the boards of the districts to bring it into operation as they chose or not to do so, and the revenue set aside to support the Act was quite inadequate. However, I am happy to say that one of the leading boards has within the last few months decided to bring the Act into operation, and I can only hope that that will be the harbinger of a better state of things. One of the Colleges of the University has a technical education department of course, and the education given there is scientific and very good.

As I told you at the outset, I was afraid I should not be able to give you more than the dry bones of what is to me an exceedingly interesting subject, but in conclusion I will again say that I believe the education system of New Zealand is worth the attention at any rate of experts and of students of education, because of some of the peculiarities of its constitution, but more particularly because it is, on the whole, in spite of certain blots, a really successful system, and one that is regarded with the greatest pride and affection by the democratic people who set it up and who watch and guard its administration.

Mr. Russell

I am here to-day to represent, and I am proud to represent, the bright little, tight little garden colony of Natal. I should like to say a few words upon education in South Africa generally. Four months ago I travelled all through South Africa; I

visited the Transvaal, the Orange Free State, and the Cape Colony, and through the good offices of the educational authorities in those States I was enabled to see a good deal of what was going on, and I was exceedingly pleased to find that all their work—primary, secondary, and higher—was quite up to date. Our little colony of Natal may be said to have existed since the beginning of our noble Queen's reign. When Her Majesty ascended the throne the streets of what is now the capital of Natal were occupied by the huts of the native races, and the streets of our seaport, where we now have dozens of schools whose attendance ranges from 700 downwards, were then the haunts of the elephant and other wild animals, roaming about in the primeval forests. I do not want to say much about education in the Transvaal. I had an interview with President Kruger, and I was struck with the great improvement which has taken place of late years in the schools of that province. It is true that many of the inhabitants of the Transvaal want their children to be content with the three R's. I do not know that in some cases they are far wrong, because I believe that the best education that a man or woman can get is that which they give themselves after they have come to the years of maturity, using as means the simple elements of education taught them in the primary schools. In the Cape Colony over which our Chairman so long presided things are going ahead there at a very rapid rate. Dr. Muir is an excellent superintendent of education, and I am sure that those of you who may have the good fortune at any time to visit these schools in the Cape Colony would find that they were equal to, if not better in many respects than, the ordinary English schools, both primary and secondary. The

trouble that we have to deal with in South Africa is perhaps one of colour. The size of the four States that I have mentioned is something like three and two-thirds times that of the British Isles, with a population of three-quarters of a million of white against two and a half millions of coloured people. Now, in Natal, thanks to a former able and most sympathetic Governor, Sir Henry Bulwer, we have an admirable system of education. We have our primary schools. We have altogether 500 schools in Natal directly under the State and controlled in great measure by the State. We have also half as many more private schools outside the control of the State. Of these 500 State-aided inspected schools, 350 are white schools, 130 are native schools, and 20 are schools for Indians. We have 22 schools belonging directly to the Government, 2 high schools, 18 primary schools, and 4 middle schools. All the other schools are inspected and receive grants varying in amount from 20*l.* to 250*l.* a year. In our primary schools we teach all the subjects commonly taught in the best Board Schools of England. Our High Schools work for the Cape examinations and for the senior Oxford and local examination. In connection with these High Schools we give every year one exhibition of 150*l.* tenable for four years at an English University. That this scheme is an admirable one may be seen when I tell you that two years ago we sent from Natal the lad who gained the blue ribbon of the educational year—the senior wranglership at Cambridge. Time will not permit me to say much about this, but I should like to emphasise what has been said to-day about the equality of men and women. We recognised that equality twenty years ago when we said that our women teachers in

Natal should receive salaries equal to those of the men, and to this day they have them. Our principle has been one of giving the teachers an entirely free hand. We say to them, 'There are the buildings, there is the apparatus, there is the furniture, there are the children; we give you good salaries; now we look to you for results.' We do not hamper them in any way by red-tape. We say to them, 'Follow what system you please,' and the result is that our boys and girls, I hope, are growing up to be as well-conducted boys and girls as you will find in any other colony. We have not forgotten what Carlyle once said, that the best university is a collection of books. In every Government school in Natal we have a library, and a good library, and the children, I assure you, make excellent use of it. I am afraid, though, that the demon of examinations has caught hold of us in Natal too; I am afraid that England and some other places are being over-examined. Not that we object to examinations, but we do not want examinations to be the end, we want them to be the means. In valuing work done, in estimating the capabilities of a man, I do not know that I am not inclined to hark back to the days of the old East India Company, when a man was chosen as much for the cut of his 'jib,' as they called it, as for anything else. I should like, perhaps, that we should award a certain number of marks for the way in which a man carries himself, the way in which he walks, his physical capabilities, and, above all, plus or minus marks for his temper and his tact. I am not going to sermonise, but the object of all education, as we know, is to turn out good men and women—men and women who will grow up to be good citizens and worthy colonists.

I can only hope that the lion cubs of England who

are growing up in distant lands may become as healthy in their mind and body as their sister and brother lion cubs who were born and bred within a measurable distance of the golden cross and the golden ball of St. Paul's.

The Bishop of Dunedin

My Lord, I came here this afternoon rather in the capacity of a learner than of a teacher, but since you have been so good as to call upon me to say some few words to this interesting and important gathering, I shall endeavour to do so. I followed with great interest the speech—the able and succinct account of the educational system of New Zealand which has been given by the Agent-General for the Colony. I think, coming from the same colony, it may be just possible for me to add a little to the remarks which he has made, and I must premise that the Agent-General, Mr. Reeves, has been known for many years, not only as an ardent educationalist in New Zealand, but also, if I may say so without offence, as being very specially attached to the system which he has so warmly advocated this afternoon—a free, secular and compulsory plan of carrying out the educational system. Indeed I thought once or twice in the course of his remarks that he must have discovered that I was in the room, and that he wanted to give me as strong a hint as he could that I was not to follow on a plan which I have lately set on foot in New Zealand for endeavouring to improve the educational system of the colony by adding to it, through the instrumentality of the clergy, something which it does not at present possess. I will say before I touch further upon that subject that, dividing the educational system into the University system and the

common schools of the country, I will just touch upon the former division in order to show that I entirely sympathise with the education of ladies in the highest schools that we can offer to them—namely, the University of the land. It is not a very long time ago since I received a very pressing invitation, almost a command, from one of my old friends in the University of Cambridge, desiring that I should go up there to vote on a particular question which you have probably heard created a good deal of warmth and interest, he being perfectly persuaded that I should vote on the side to which he belonged—namely, against the admission of ladies to the University. The invitation was a very pressing one that I should go up and record my vote. I could not do so as it happened, but I wrote to my friend to say that, if I had accepted his invitation, it was quite possible that I might not have voted as he wished, because I had had now for some years an opportunity of watching the system which has been described so well by Mr. Reeves, and I had discovered that many of those objections to which theoretically I looked forward in the working of this scheme of joint education have found no place in practice. I do not say that I am altogether without some criticisms upon the plan or scheme, but, speaking generally, it has worked very well so far as I know, and those objections which are sometimes urged against it have found little if any place. I should certainly prefer myself that the women had a place of residence separate for themselves, and possibly in some subjects separate class-rooms—I am alluding particularly to the Medical School and so forth—but these are mere matters of detail. On the whole, the system of University education, so far as regards the question of the

mixing of the sexes, has not in my judgment produced the evil results which have been freely anticipated. Then, passing on to the general system of education, and more particularly to the primary schools, I want to say, with regard to that, that I do think it is possible that our system might be improved. We have heard, and I concur with what has been said by Mr. Reeves in general terms, of the goodness of the education that is given. It is of a very high value; the teachers are well qualified; there is a great deal of most estimable work and a product of the utmost value to the young community of New Zealand. It will be expected, perhaps, that the little criticism I shall make would be in the direction of a little more freedom of admission of other persons into the schools than the teachers. I allude more particularly to the fact, as I think a system such as Lord Lorne was describing as having a place in Canada [1] might very well be adopted in New Zealand, to the advantage of all concerned. I mean that within the school hours the teachers of religion, either clergy or those who represent the clergy, should have an opportunity of addressing the children belonging to their own communion upon that most important matter. I should like, however, to say also that, though Mr. Reeves stated somewhat strongly the reasons why a State system had not produced that uniformity which State systems are commonly charged with producing, he said that we were very much decentralised. I admit that the circumstances of our colony have somewhat checked the disadvantages of a purely bureaucratic system; but at the same time I must remark that the newspapers of the country and a great many of the residents do sometimes say that our system is a little

[1] See p. 294.

too uniform, that the State system, being entirely supported by the State and free therefore to all individuals as regards primary schools, does not give any opportunity, or scarcely any opportunity, for the existence of private schools side by side with the State schools. There is, therefore, little chance for one system to vie with the other or for any real rivalry, and though I fully admit and believe that the State system as regards the secular subjects is a good system, still we take it all on the description given by the officers of that system themselves; there is no opportunity for the children taught in the State schools to compete with children taught in any other institutions, to show really which is the better of the two. I feel, therefore, it is just possible that this system is chargeable to some extent with a deadening and levelling influence such as has been hinted at. I shall only further say that there is not that entire satisfaction with the system in New Zealand which might perhaps be inferred from the warm admiration which has been expressed by Mr. Reeves. I will illustrate my point by informing you that for twenty years at least I have been a member of the General Synod of the province of New Zealand connected with the Anglican Communion, and for at least twenty years at almost every General Synod meeting which I have attended, there has been a discussion on the education system of the colony, and some effort to produce an amendment of this purely secular plan by some alteration of the Act of Parliament bearing upon that subject. It is true that hitherto those efforts have failed; but the feeling of dissatisfaction on this subject has not died out—on the contrary, at the last general Synod it occupied for a very long time

—two or three days, I think—the attention of the Synod, and was more marked than ever. The members of the Anglican Communion comprise, roughly speaking, one half of the population of the country—I believe it is a fraction under one half—but that large proportion of the population of the country are becoming more and more convinced that they will have to make their opinion felt upon this matter. So much is this the case, that Mr. Reeves knows very well from John o' Groat's to Land's End in New Zealand—that is, from Auckland to Invercargill—discussions went on before the last general election upon this subject, and schemes were ventilated and projects put forth for an alteration of the Act bearing upon education in the country, to give some opportunity, whatever it might be, to religious teachers to go into the schools. I may say in regard to my own clergy, if I may touch upon that subject for a moment, we did try to follow out a plan of getting the children together after school hours, and for some three years the clergy of my own diocese put themselves at the disposal of school committees, to teach children religion after school hours. But of course it was very soon found that those children who did not stop had the opportunity of playing at marbles, and everything else, and therefore their companions did not very much care about being kept in school for religious instruction, and so it was like handicapping religion, if I may use such a term; under these circumstances I felt the plan was more likely to do harm than good, and therefore I stopped it. But there is an education league now in existence which represents the Diocese of Dunedin, and a great number of letters are written on that subject in the papers from time to time, and constant attention is being drawn

to the too large proportion of criminality amongst children, and of wrong-doing in the way of peculation and suchlike things which follow naturally perhaps on the refining and sharpening of the intellect, without a corresponding foundation of morals—these things are so constantly noted that I wish this great Congress to allow me to supplement the remarks which have been made by my excellent friend the Agent-General for New Zealand, by the additional information I give. There is a smouldering and more than a smouldering dissatisfaction upon this subject, and it is very likely indeed, though he says emphatically that there is no chance of an alteration of the law—I say that possibly time will have something to say upon that subject. I accord my meed of praise to the Roman Catholics for the self-denial with which they carry on their own separate schools, and I should be only too glad if we could have more distinctive schools connected with the Communion to which I belong; but we have not set them up partly in the hope that we might ere long influence the Government of the country, as we wish to show our appreciation of the great value of the scheme on the whole, although we want to supplement it in the direction that I have indicated.

Before we separate, perhaps you will allow me to move a very hearty vote of thanks to our Chairman, Lord Loch. I, for my part, have had some experience of foreign systems of education, but I have never till now had the advantage of hearing in so short a space of time so much authoritative information about the education given in our colonies. In one respect that information is even more interesting than that connected with the educational

Sir Philip Magnus

systems of France, of Germany, or of Switzerland; for in all those cases we are dealing, after all, with education adapted to those persons who are foreign in spirit, in character, and in birth to ourselves. But in the colonial systems described to us to-day, we have been told about educational systems carried on by persons who are our own kith and kin, educational systems which have not been created with a view to meeting new and original wants. I myself can certainly corroborate from my own small experience something that Lord Lorne has said with regard to the fact that the technical education in New South Wales is certainly up to date. From the description that we have had of the university education for women in New South Wales, we may be able to learn a very great deal. I do not think, however, that any system which has been brought before us has been more interesting than that connected with the primary education of New Zealand, a system which is full of interest, full of new features, and giving us very much to reflect upon. A system of education in which there is no School Board rate, in which the Government contributes 3*l.* 15*s.* per head for every child regularly attending, a system in which every inhabitant is taxed to the extent of 16*s.* 8*d.* per head, has signs of simplicity about it which certainly heartily commends itself to our consideration.

After seconding the vote of thanks Mr. Reeves added.

The Hon. W. P. Reeves

I have to thank his lordship the Bishop of Dunedin for the very courteous tone and manner in which he couched his criticisms of the New Zealand system. With regard to the question of the drift of public opinion—I will not detain you by defending my argument—his lordship's views go in

one direction, my views go in exactly the opposite; but so far as he stated that the statistics of crime, and in particular of peculation, were unhappily larger amongst children in New Zealand, there you must permit me to give him my emphatic though courteous contradiction, and to refer anybody who is interested in the matter to the very carefully prepared statistics of all crimes and offences which the Government of the colony will be prepared to furnish.

The Chairman

I beg to thank you very sincerely for the vote of thanks which you have accorded me for being here to-day. In my address I merely opened the proceedings for those who were to follow me; I did not know, I did not understand that it was expected that I should enter into details of the education in any one of the great dependencies of the Crown. But as a good deal has been said with reference to the education in New South Wales—the graduate system that enables women to compete with men in the great educational institutions—I should like to say that there are equally institutions in Victoria that enable women to come forward and in many cases to compete with men with regard to their degrees, and especially for medical degrees. They study in the Melbourne hospitals, and they have an equal opportunity with the men to obtain medical degrees and to practise in the medical profession. I might enlarge to a very great extent with regard to the general system of education in Victoria; I could do so likewise with regard to the education in Cape Colony and in other parts of South Africa, but I will confine myself to saying this, that the education in those two colonies is in no way backward: the education,

whether of men or women, is not backward as compared with the education in any colony of Her Majesty's dominions.

UNIVERSITY EXTENSION

The Chairman, Dr. Alex. Hill, Master of Downing College, Cambridge, having introduced the subject, called upon Miss J. D. Montgomery, of Exeter, to explain

The Origin and Aims of University Extension

Miss J. D. Montgomery

It is hardly necessary to say much about the *origin* of the movement which is with us to-day as a well-known and beneficent fact, or, rather, a living Power. Perhaps, however, it is worth while to recall that behind all facts there lie ideas, and to ask What are the ideas which lie behind the fact of University Extension? Precisely those which lay behind the establishment of the Universities themselves: on the one hand, an eager desire to learn; on the other, a generous readiness to teach. There are many other resemblances between the foundation of Universities and the extension of their teaching; but for lack of time I will only mention one other, the *spontaneity* of both movements, both being the result of impulse from within, and not of impetus from without.

If we ask why these ideas existed in the thirteenth and nineteenth centuries, we must look to the history of both times, and note how each has been marked by a Renaissance. Though that of our own time has struck a deeper note than the earlier one, the first meant increased realisation of the joy of life; the second, more serious recognition of its responsibilities. And among the signs of our modern renaissance we may include the progress of education, and its development

in three directions: (*a*) among the industrial classes; (*b*) its extension to women; (*c*) the increased responsibilities accepted by the Universities with regard to national education.

I will pass now to a more congenial subject—the aims of the movement. One is almost perplexed by the multiplicity of these aims, and I must speak of them in several categories. First we have the *intellectual* aims. (1) The maintenance of a high ideal as to what study should be. We can hardly be brought into contact with the Universities without being reminded that study must be a strenuous exercise, calling for perseverance and patience; and to have that constantly kept before us is no slight intellectual gain. (2) The movement provides two necessary things—stimulus and direction. It would be dangerous to have one without the other. Enthusiasm is indispensable, but it needs direction. Our movement supplies these two things by two sides of its work. It supplies stimulus by pioneer lectures, summer meetings, and such conferences as the present. It supplies direction in its more organised system of teaching. And we are all glad to see that there is a great increase of steadiness in the centres; they demand courses of study in sequence; and in many places these are supplemented by students in a manner which means independent work. (3) Another aim is to supply intellectual discipline. The movement stands for this—it is a protest in favour of kindly discipline. It tells us that it matters a great deal how we get our knowledge. It teaches us how to use books. We want to be reminded that reading a book is one thing, and using it is another; the latter means a much more intelligent method of study than mere reading. (4) A most important part of

University Extension method is the weekly paper work. This teaches many things, amongst others the difference between illustration and argument, which I think all inexperienced paper-writers find it difficult to understand; and it also teaches students to cultivate the habit of condensing what they have to say, and putting their thoughts in clear style. Secondly, the movement has *moral* aims. (1) We do not realise the terrible burden of monotony which weighs on the lives of many who are engaged in pursuits which do not vary from day to day. It is a crushing monotony. With regard to that, you will remember how the first movement towards University Extension came from working men and from educated women. There is this in common between them—the lives of both are very largely occupied with small things. I am not behind anyone in recognising the absolute sacredness of small duties. But if a life is occupied solely with small things it will inevitably tend to become petty in itself. These small duties will be more brightly and more intelligently done if they are seen in relation to the larger life outside. That is one of the benefits of the movement—it helps us to see our small lives in connection with the larger life around us, and brings us into constant connection with those whose whole way of life is different from our own. (2) Another moral gain is that the movement helps us to see the need for securing the full development of our lives. Many people are cramped in their moral growth because they have no stimulus to develop certain faculties, and when University Extension comes to them and brings them into relation with others who have had more opportunities for study, unsuspected powers are discovered. One of the benefits of the movement is to develop these. (3) To speak still

of moral benefits, surely it ennobles life. Life is neither all amusement nor all work. We want our lives to be brightened and ennobled by intellectual pursuits, and by sharing them with others. I had a letter recently from one of our students, who says: 'I have always thought life worth living; but since I have been a student there has been all the difference between the ebb and flow of tide.' Thirdly, not the least important are the *social* aims. (1) There are so many who are in uncongenial surroundings, who have little sympathy in their homes, who are depressed by the sense of isolation. By this movement they are brought into communication with others who are like-minded, and find the stimulus of companionship. (2) I know of no other organised national movement which does so much for the training of citizens. How important it is that working men and women should have some teaching in the history of their own country! It is dangerous that narrow views of imperial matters should be taken. It cannot be that people can fully realise the idea of our wide empire if they group all foreign countries together in one term, 'foreign parts,' and look upon foreigners 'in the lump' as bad, which is a danger of the average Englishman. (3) It is another of our social aims, and one of our great difficulties, that class should meet class in a natural and simple way. There is no difficulty in social intercourse if we have a basis of common sympathy. It is the want of that which makes it difficult to know what subjects we have in common. If people are University Extension students they will never feel this want. It makes very little difference what a man's occupation is, or how he is dressed; but it does make a very great difference whether he has education or not—educated

and uneducated people look at life from such a different point of view. One of the social aims of the movement is to provide this common interest for all classes. Fourthly—is it safe to go any farther? Perhaps I may be allowed just to state my own conviction that University Extension has a higher bearing still—that it has a bearing on the *spiritual* side of life. (1) It is a protest against materialism, for it teaches us that 'the life is more than meat.' That is a truth we need to be told, especially in this nineteenth century. (2) It helps to develop certain habits of mind which have a most important bearing on the higher spiritual life. Coming into contact with men who are masters of their subject, must help to train us in habits of humility and reverence, and these are both important to our highest spiritual development. Do we not also learn the need for suspended judgment? that there are points where finality has not been reached, and the only wisdom is to suspend judgment? It also helps to check that sort of cheap cynicism which is sometimes met with. It has been said that the cynic knows the price of everything and the value of nothing; but we learn to see the true value of things which are valuable. That is a habit of mind worth cultivating, and has its bearing on the higher life. This movement, then, in its highest development, teaches us three things—that great is hope; greater is faith; but greatest of all is charity. J. D. MONTGOMERY.

The Chairman.—We must all acknowledge that Miss Montgomery has given us a most admirable definition of the purposes of University Extension. We all imagine we have a general idea of the purposes of University Extension, but need that some one should work them out in detail, and we must acknowledge the excellent way in which Miss Montgomery has done this. I will now ask the Rev. Hudson Shaw to speak to us.

On University Extension, with special Reference to Working Men

The Rev. Hudson Shaw

The particular subject assigned to me is University Extension in relation to the working men of England. It appears rather unseemly at first, at this particular time, to be called upon to discuss that side of Extension work. One remembers that in May 1867 University Extension in England really began, when Professor Stuart delivered his first lectures to cultivated women on this topic. That was the real start of the movement, thirty years ago. Almost immediately afterwards Professor Stuart delivered lectures to working men, and that stamp on our movement has never been lost. We have still our two main wings—the right wing, our educated women; the left wing, the unsuccessful part, the working classes. I would like to remind the audience that, whereas I suppose we have altogether at the present time in our movement a band of about 100,000 or 120,000, of these 120,000 not more than 15,000 or 20,000 can be ranked as really belonging to the working classes. We have no cause to be ashamed of what has been done, University Extension is no longer in the experimental stage. It may have its ups and downs, bad attendances one year, to be replaced by better the next; and something of the same kind is bound to happen in the future. It has been stated that when a man comes into a room he finds there just what he brings; and the same can in a limited degree be said of this movement—each one who comes into it finds just what he brings. Some people come wishing for an organisation which shall

prevent the great waste of talent, genius, and power in those classes who have not access to the Universities. Some wish to spread the net far and wide, and to show that no one who has real power and genius shall be debarred from the Universities. We must live in harmony with all sides. We find occasionally instances of men who can go to the University at once. We are all aware of two or three conspicuous examples. There are men at Oxford and Cambridge who would not have been there but for this movement. One, an Oldham student, Joseph Owen, who is an Historical Scholar of Balliol College, is a striking example of the way in which the University Extension movement works. This man is one of really striking character with enormous powers of work and perseverance. He has had nothing to help him except free libraries and similar aids. He left school at ten years of age, worked hard for success, and was sent up to the Oxford dons to do what he could; and in spite of the fact that he had no Latin or Greek, they gave him, although he had a wife, a scholarship of 50*l.*, purely on account of his work in connection with the movement. That was two years ago. Within six weeks he was sent in for an open competition, and won an Historical Scholarship of 40*l.* a year. Now this was perfectly open, and some of the best men in England were in it. Joseph Owen, the son of a weaver, beat all competitors. Within fourteen months of the time of learning the Greek alphabet, Joseph Owen passed all the University examinations in Greek, Latin, and Mathematics, and at the present time no man in Oxford has a better chance of taking a First Class in the final schools. That is just the way in which University Extension may be made to gather up all these poor men, going

back to the mediæval idea of having the Universities filled with the sons of peasants and labourers. England is losing a vast amount of power for want of machinery. A University exists mainly for that purpose, and if we only pick ten out of ten thousand and give them a University education, the movement is justified. You might sweep away all our machinery and all our examinations, but I should still believe with all my heart that University Extension has its right place. There are those who hold the view that we have ventured upon the most dangerous political experiment the world has ever seen. We have never before had an educated democracy. I am a democrat to the backbone, but I do not believe in an untrained, uneducated democracy. That is our danger at the present time. I do not stop to inquire whether one party wish to beat the other or not; but we have given the democracy its vote, and unless we see that the men who now govern are good citizens, this transfer of power will be a source of danger. In 1867 we were told we must educate the masses; Mr. Robert Lowe used this phrase. We have to educate the English democracy in citizenship. This is the noblest task which lies before us at the present moment: if you can do something to train the democracy in citizenship you are doing a magnificent work. You may say, 'Have we not done it? Are we not spending 10,000,000*l.* a year in education?' We are only giving them the outlines of education, then sending them out into the world at thirteen years of age and doing nothing more for them Millions are turned out every year who can give no decision upon the great problems of the present time. We have had an object lesson this week in connection with the Jubilee celebrations, and what University

Extension has to do is to give a thousand object lessons of this kind. We have to enable the people to realise what the empire is and what it has to do. I spoke of this side of the movement as not being successful. I am not surprised that we have done so little; what surprises me is that we have done so much. We are dealing with men who are toiling for hours in factories and workshops; we expect them to read, to attend lectures, and so forth; and I am amazed that they have done so. There are numbers of towns in England, and thousands of people, taking part in our movement; vast classes and vast audiences—working-class audiences—in England and America. The future is full of hope, provided we can get help from two sources—men and money. The men can be found, but we want more men with this grand hope in their hearts, this hope that they will do something before they die to aid the cause of the working classes. We must go for social reform. It is not a mere educational programme we want; the movement has before it the enlightening of the great masses in the country. We live in an age of millionaire worship, but we as a movement stand on the old University idea, 'Plain living and high thinking.' We stand up for the extension of intellectual privileges to all women who wish to possess them. We stand up for the Imperial idea, and we believe in the English destiny. We see the difficulties before us in the next century. We must have the full and complete training in citizenship for the working men and women of our land. We contend for the definite right of men not merely to exist but to live; to be not mere hewers of wood and drawers of water, but to act on the ideas of culture which God has given to you and me. Carlyle wrote that it was

not for his toil that he pitied the working man, but that any man should die ignorant to whom God had given the capacity for enjoying knowledge. In the twentieth century it will be our chief business to prevent that.

The Chairman.—I thought it was in 1872 that Mr. Lowe told us we must educate our masses, but Mr. Shaw has put it back to 1867. It appears from his speech that we may discuss University Extension from almost any point of view. I will now call upon Professor Tout to address you.

Professor Tout

I should like to speak as one who lives where working men are numbered by millions, as in Lancashire, where the popularisation of high teaching to working men is carried on on a large scale. I should like to emphasise the two points so eloquently and forcibly brought home to us by Mr. Shaw. He said we had not done much in the way of bringing lectures to working men, and he also said it was a great wonder we had done even so much. Any one who is living in Lancashire would re-echo both these statements. It is quite a wonder to me to find how men who have been hard at work all day, when they come home, should not either go to sleep or else gossip. There must be something in lectures which attracts them from their homes. If anyone who has heard Mr. Shaw lecture has ever seen a person asleep, I can with safety affirm that I have not. In Lancashire the upturned faces when he lectures, the skill in argument, and even the 'heckling' of the lecturer, are a refreshing proof of the interest taken in the lecture. It is not because they can sleep more comfortably at a lecture that they go, but because they can see that the lecturer has for them something new, something stimulating, something different from the soul-destroying routine in which their lives are

passed. To make these lectures effective you want, as Mr. Shaw has so ably pointed out, the men and the money. As to the afternoon audiences of ladies, they are often exceedingly critical, but they criticise more or less on academic lines. Anyone who can give a plain, straightforward lecture, clear and to the point, will at least obtain a *succès d'estime*. But before these working men's classes the ordinary lecturer will not do. There are many who are quite successful as teachers who do not succeed with the working men. Then as to the question of money—that also is a very real one. Working men's lectures are expensive. You want the best sort of illustrations and apparatus; you want good halls at the right time and place; and you want to let people in at a fee so small, that even a penny audience does not anything like pay its expenses. At Manchester that is our chief difficulty. In the great manufacturing districts there are very few places indeed where we can get enough money to run a successful workmen's course. Where there are organisations like the Oldham co-operators, you have the funds and the audiences also; but in Manchester, the University Extension movement is nearly dead from lack of funds. I feel something like indignation when I find in some counties and districts vast sums of money positively wasted on what is called 'Technical Instruction,' while the few hundreds a year which we want cannot be obtained. Our great problem is to persuade the local bodies to remove the silly restrictions which prevent lectures from being subsidised from those funds which they have at command. I may perhaps say one word about that side of the movement in which I am particularly interested—namely, giving lectures to pupil teachers. I have taken part in that movement both as a lecturer and as an

organiser. The young pupil teacher is not of course a working man, but in speaking to them we do speak to people who will produce a working-man audience. Only a few weeks ago at Owens College we had a young lady elected to a scholarship, whose historical education was mainly obtained as a pupil teacher in University Extension Lectures.

The Chairman.—As long as University Extension exists we shall connect it very much with one name. The early success of the movement was due in very large part to the careful nursing it received from Dr. Roberts, whom I will now call upon to address the meeting.

Dr. Roberts

I should like to say one word about the machinery of University Extension. No one can deny that it is impossible to estimate the good results of University Extension merely by taking the examinations or attendance at classes, or the numbers of certificates. The influence of the lectures and the movement has extended far more widely than to those whose names are included in the heads I have mentioned. There is, however, a little danger that in recognising that fact we may fail to see what is the exact value and importance of class work; the examination at the end of the work of the class is very well in its place. Miss Montgomery put most admirably in her inspiring address the value of the movement in training the mind, in cultivating a right habit of thinking, and giving an insight into methods. It is obvious that you do not get mental training by listening to lectures. The people who get mental training are those who put down their thoughts on paper, who master the books which have to be read, and finally submit themselves to the test of examination. Few regard University

Extension as a means from the point of view of mental training. These elements of the machinery are of the first importance. It is true the movement has helped a vast number of people. It is a question with me whether this would have been the case without these serious students. Imagine University Extension as nothing more than popular lectures ending in examinations and so forth; do you think it would have lived for twenty-five years? I think not. Nevertheless, in spite of that, the fact remains that it has lived and done a vast work outside these things, which will be increased and extended. I wish very strongly to impress upon you the great importance of those elements in the movement which make for the cultivation of accurate thinking. I believe we cannot really set too much store by these elements, but the influence of the movement extends far beyond these. Miss Montgomery told us that the movement has gone strongly in the way of more continuous courses of lectures. That result has been obtained simply by the offer of more advanced and more highly prized certificates by the university authorities. We all need crutches to help us on with our work. When I was a student, but for the degree to be obtained I could not have applied myself so steadily to my work; nevertheless, although the examination and the degree at the end were not the highest object to work for, yet by working for these I gained something of the higher object. If that is true of the young man whose business it is to work for degrees, surely it is far more true of those working people who come to our lectures. Therefore, if you can give this aid, stimulus and help to people to carry on their work steadily, you are doing a good thing. I wish the Universities could be got

to realise more clearly than they do, that the most important value of a degree is this—it is a lever by which you can lift people to a higher level than otherwise. Therefore I only wish to say this one word: I believe the very existence and success of University Extension has depended upon the number of serious students it has been able to create, and it is by offering greatly advanced certificates that the Universities have been able to bring the movement into its present strong position. I feel sure that the policy which the Universities must adopt if they want to strengthen this movement as a great education for the democracy, is to see that they have in their hands the lever by which they may raise the level and standard of education to almost any point they like; and so induce an increasing number of people to undertake serious study, and give them a kind of mental training of immense value as citizens of this great empire.

The Chairman.—Throughout the country in this movement women have been represented by trained men, but I was delighted when Mr. Shaw's man student was capped by Professor Tout's woman student at Owens College. Mrs. Fawcett will now speak to us.

Mrs. Fawcett

I have no doubt that many of you will remember an interesting passage in one of Ibsen's addresses, in which he says he does not believe that mere democracy will ever solve the social question. He looks for this chiefly to the aristocracy—not the aristocracy of birth, but the aristocracy of intellect, of mind, of heart. He hopes that in the future this aristocracy will come mainly from two classes—from workmen and from women. We have been told how this movement began from a desire to meet the demand for

education, which sprang up first among women and then amongst the working classes. It is very satisfactory that these two classes have gone on working together and having their needs satisfied together. Miss Montgomery pointed out the political as well as the personal advantages of bringing the two classes together. One of the advantages of this movement is that it brings different classes together, and gives them common interests and a common object. One speaker has said that in the North of England ladies attend the afternoon classes and the working people the evening classes. In London they often attend the same classes. When I lectured, I did so in the evening, and my classes were attended by working men and also by the upper classes. With regard to the very interesting example which Mr. Shaw gave us of the brilliant success in the University classes of the student at Oxford, we were all interested in hearing what had taken place. But we must not fix our ideas solely on these very brilliant results, which are of course exceptional. We value University Extension because of the new light, the new outlook it gives to thousands of men and women who may never attain any special distinction; it ennobles their everyday thoughts and duties, as was so eloquently stated by Miss Montgomery. I heard of a class, one member of which was a young man employed in the Post Office; he spent all his spare time in getting up the Greek Grammar. He said he would not rest satisfied till he had read every word that Herodotus had ever written. I was interested in Miss Montgomery's remark about the power education gives, and the wider outlook it affords, thus ennobling the little duties of life. I do not know how far University Extension has been successful in reaching the lives of working women. We

shall have to look forward to this when the new energy of the new century has had time to work. When we think of the grinding drudgery of the lives of working women, what a blessing it would be to give them this new outlook, so that they should feel when they are cooking, washing, or what not, for their children, that there is something nobler in these humble tasks, and that they are doing work for England—work which will form them into citizens, work which will form the men and women of the future and conduce to the eventual glory and greatness of the nation!

The Chairman.—In 1885 Oxford University returned to the University Extension movement (which it had somewhat dropped) with an energy and enthusiasm and expensiveness I never thought possible of attainment. We all know the fount of that enthusiasm—Mr. Sadler. He has now other duties to perform, and we hope that he will enable us to remove the financial difficulty which Mr. Shaw spoke of.

Mr. Sadler

I think the impression left on one's mind by the interesting speeches we have listened to, is that the real value and significance of an educational movement is not to be measured by the number of people among its direct supporters, but by the quality and value and range of its influence. I think we are speaking by the book when we say that at no time in its previous history has the University Extension movement got such a deep, firm grip on the mind of Europe as at the present moment. We must provide the best sort of education for toiling workers, and in some way or other the Universities must be connected with the work. The devising of methods of establishing such a connection is the work of the University Extension movement. I remember on one

occasion that some one complained in Mr. Ruskin's presence that a wet morning was a dreadfully ugly day. Mr. Ruskin replied: 'There is no such thing as an ugly day; there are only different kinds of beautiful days.' We are bound to go though our hot and cold fits. They both mean progress. We shall find out the real meaning of the University Extension movement, and in doing so we are making much faster progress towards our ultimate purpose than we were making five or ten years ago. If we cast our eye over the whole of the English educational system, we find everywhere hesitancy and reflexion as to the best forms of organisation, as to methods of teaching, as to curriculum and aims. But under all this apparent uncertainty there are signs of a steadily growing conviction in the English mind that education is an absolute necessity, and its organisation a national duty. We have never been so near conviction as to the need of universal education as we are now. Four or five years ago there seemed to be some chance that the Universities would organise and administer what Miss Montgomery and Mr. Shaw have called a system of adult education. That aim was checked by agricultural depression. If ten colleges at Cambridge and ten at Oxford could have done what Christ Church and Balliol did for University Extension, we might have built up in a great many towns in England the same kind of institution as Mr. Mackinder has been so successfully building up at Reading; but the fact that College revenues and University revenues were depressed proved to be an insuperable barrier to the early attainment of such an aim. Yet behind the reluctance to take this rapid step forward there was a true instinct—namely, that in the organisation of any popular work of

this kind various powers must co-operate. It is not by Universities alone that a work like this can be done, but all must join in a composite work which is a common task for all. The practical result of this temporary check is that we may attain a much higher, wider, and more fruitful solution—namely, a scheme in which various agencies, academic, administrative and voluntary, will co-operate in providing adult education of various kinds for men and women. Mr. Shaw's eloquent and stimulating address brought many thoughts to our minds. It made me feel whether it was not true that during the last ten years our English democracy has been going through a tremendous course of practical political education. In no earlier period of similar length, since the great changes took place which have altered the basis of our government, have so many problems of the first importance arisen, alike in the sphere of home affairs and in the sphere of international relations, to tax the intelligence and to challenge the judgment of the electorate. The effect on the public mind of this succession of problems seems to me to have been the production of a certain hesitancy of attitude towards many principles and opinions which previously seemed unassailed by doubt. There appears to be a tendency to seek out the historical causes which have produced the present state of things and to examine the ethical principles which underlie national policy. May not the next stage be a great demand for higher education, for the better education of citizens in the duties of citizenship? In such an event it is to the Universities that men will chiefly turn for the creation of a staff of teachers competent by education and training for so great a work. Many think that in the next generation we may see a tremendous struggle between the demo-

cratic and the aristocratic idea. If any such struggle is impending, there is no more pressing need than to place betimes within the reach of all those men and women who deserve it and qualify themselves for it, access to the best moral and intellectual training which education can afford.

The Chairman.—One of the earliest Extension lecturers was Dr. Lawrence, who will now address the meeting.

Dr. Lawrence

I want to say a word or two upon a point spoken of more than once to-day, which will, I think, bear to be looked at yet again. First let me say, do not suppose that you have convinced the people of this country of the need of education. You have convinced a very large number of them, but there are many who remain not converted, especially in the rural districts. Only two mornings ago I was told by an excellent old woman in my parish that education was at the bottom of all the wickedness in the world, and that it was a curse and a grievous shame that little boys like her grandson could not go to earn their living at seven years of age. As Mr. Sadler has told us, the University Extension idea has come, and come to stay. Yet we must remember that the outward forms in which that idea has been clothed during the last twenty-five years have not come to stay. Everything in connection with our system of education is undergoing a change. We have produced before us from time to time indications that the great problem of education has not yet been solved. We have heard about the need of making intelligent citizens, and a greater need does not exist. It has been too much assumed that lectures are doing all that is needed. It seems to me that they cannot and ought not to try. We have our

evening continuation schools, our home reading classes, and then we have the work of our technical classes. Surely it is the thing to do to collate all these different organisations and join with them the work of the Universities. If these various departments could but be linked together, if the people working in these various departments could but be brought together, brought into contact, much energy could be saved and much advance made. The Universities have the experience of centuries to draw on, and men at their command, and they could surely find the people to do what Mr. Mackinder has been doing at Reading, what Mr. Clayton has done at Exeter, and what has been done on a similar scale at Colchester. All this requires money. The Universities and everybody connected with them would benefit by this work. If the Universities do not keep in touch with the nation, then the life of those Universities is limited. The Universities are poor, but they still give scholarships. Unless the Universities will move with the times, they will be left behind in this great educational march of progress. We want to bring together those workers who are now separated, and we want the Universities to have their place, not merely in sending out peripatetic lecturers, but in providing men who can co-ordinate these branches, and produce something that will last for generations.

The Chairman.—The local Colleges have been mentioned with pride by several speakers. I will therefore ask Mr. Mackinder, the Principal of the College at Reading, to close the discussion.

Mr. Mackinder

I should have preferred not to say anything further, but I feel that in the work with which I am connected there are problems which differ from the ordinary problems. I would venture to say that while listening to the admirable addresses

made in this discussion it occurred to me that we might put certain aspects of the aims of University Extension in these two forms: We aim to get people to appreciate the value of ideas and also the reality of knowledge. It seems to me that we, as a democracy, are in danger of being attacked by a very terrible disease, which is incident to this enormous diffusion of cheap printed matter—namely, that knowledge resides in books and not in men. It always appears to me that one of the most admirable things University Extension has done is that it has brought the writers of books into contact with the class of people who read books, and has made them feel that knowledge is something resident in men's minds, and only a very small part of it can be put into printed matter. The greatest author is always greater than his greatest book, and knowledge is something to be viewed under the thirty-two aspects of truth, and not under the limitations of the written page. In dealing with the type of working men, the chief fact one comes across is, that they have a wooden view of knowledge because they approach it by the aid of the printed page, and never come into contact with the depositaries of knowledge behind the printed page. I think one is justified in assuming that at this time, when things are changing, we should be very catholic as to methods and aims. We are in danger of failing with the working man because we present to him the machinery which is fitted to the writing and reading classes. Knowledge can be appreciated and ideas grasped without all that paraphernalia of class work and examination. After trying hard with the working man, the conclusion I have come to is that the mere mechanical effort of writing is so great an obstacle to him that you fail in your main object because you insist on this *pons*

asinorum being crossed. You may get, in a really well conducted discussion with working men, all that movement of mind, all that criticism, all that insight that is gradually obtained from looking at things from different points of view, by writing, and by reading various kinds of books. We should look upon the aims of University Extension as being very broad, and as bringing the reality of learning to those who cannot get plenty of books, and adapt our methods to the classes we have to deal with. We have been moved too much by the academic methods, which are not fitted for the exceedingly intelligent citizens whose experience lies in the workshop, and who are eminently fitted to make good citizens. I plead therefore for catholicity in our aims and methods.

A vote of thanks to the Chairman, proposed by Mr. J. A. R. Marriott, closed the proceedings.

INDEX

Aberdare Hall, Cardiff—Education section exhibit, 4
Accommodation, power of, in the eye, 109
Agar, Miss—Horticulture at Wycombe Abbey School 172
Agricultural education:
- Aim of, 122
- Australia, 173
- Bee-keeping (see that title)
- Canada (see that title)
- College training unsuitable for women, 141
- Commercial branch, 148
- Dairy work (see that title)
- Domestic arts instruction, necessity for, 146
- France, 168
- Government aid in England, 171
- Horticultural College at Swanley, 135, 144, 145, 151, 152
- Ireland (see that title)
- Scientific training, advantages of, 150, 170

Agricultural pursuits, rougher kinds of, not suited to women, 142
Alexandra Hall, Aberystwyth—Education section exhibit, 4
Anderson, Miss—Women factory inspectors, 203
Anerley Poor Law School, 49, 55
Apiary (see title Bee-keeping)
Apothecaries' Hall examination, 88, 99
Arabs' standard of good sight, 107
Armstrong method of teaching science—Education section exhibit, 13
Ashford Poor Law School, 50
Asquith, Mr., and women factory inspectors, 213, 226
Australasian Education, 286, 290, 295, 324, 330, 331
Australia:
- Agricultural education, 173
- Dairy work, 173, 174

Bailey, Miss Nancy—Indexing, 196
Banstead Poor Law Schools, 44, 50, 55
Barnett, Mrs.—Pauper children, 33
Barrack school system (see title Poor Law Children)
Bateson, Miss, and market-gardening, 172

Beck, Mr. T.—Indian education, 282
Bedford College—Education section exhibit, 5, 8
Bee-keeping, 134:
  Australia, 174
  Ireland, 138, 169
Bengal, women's education in, 99, 238, 264, 268, 281
Bethune Girls' School, Calcutta, 264
Bhandarkar, Dr., and women in ancient India, 258, 271
Birdwood, Mr.—Higher education in India, 240
Birmingham guardians, village communities started by, 39
Blackheath High School—Education section exhibit, 20
Blackley, Canon—Paupers, statistics, 34
Blind children:
  Board schools for, 30
  New Zealand State school, 314
Blyth, Dr. Wynter—Factory Acts, 236
Board Schools:
  Attendance, statistics, 27
  Blind and deaf children, special schools for, 30
  Education code, 29, 66
  Education section exhibit, 26
  Evening continuation schools, 31
  Feeble-minded children (see that title)
  Penny banks in, 32
  Pupil-teachers' centres, 29
  Recreation, 32
  Teachers, statistics, 28
  Technical training, 31
  Uses other than educational, 31
  (See also title Elementary Schools)
Boarding-out system for pauper children, 38:
  London children, difficulty with, 44
  New South Wales, 62
  New Zealand, 313
Bombay Presidency:
  Bombay University, 241, 246
  Colleges, 244, 250
  Public service, native officials in, 251
  Schools, 244
  Women's progress:
    Education, statistics, 267
    Female normal schools, 263
    Primary and secondary education compared, 266
    Schools, 262, 263
    Students' Literary and Scientific Society, 263
Book-keeping—Agricultural districts, instruction needed in, 149
Borough Polytechnic—Education section exhibit, 23
Botany—Education section exhibit, 18, 21, 23
Boyd, Mrs.—Medical training of women, 95
Bradley, Miss Edith—Education section, 1
Brain power in elementary schools, statistics, 65

Brain work and physical condition of body, connection between, 63
Breadmaking in Leavesdon Poor Law School, 56
British Dairy School, 132
Brushwork—Education section exhibit, 9, 20
'Bun and Coffee' lunch, Mrs. Garrett Anderson on, 93
Burgwin, Mrs.:
  Feeble-minded children, 66, 69
  Health in elementary schools, 68
Business, starting, advice on, 183, 184
Business knowledge—Men and women compared, 177
'Business-like,' definition of, 177
Business training:
  High School education, effect of, 194, 196
  Necessity for, 179, 180, 181, 183, 185
  Time required for, 187, 188
Business women:
  Defects in work, 191, 195
  Education suited to, 190, 194, 196
  Health, advice on, 192
  'Lady,' definition of, 177
  Opportunities for, 185
  Pioneers, 178
  Qualities essential, 190, 193, 196
  Salaries, 186
Butter-making (see title Dairy work)

CALCUTTA, women's education in, 99, 238, 264, 281
Cama Hospital, Bombay—Education section exhibit, 8
Cambridge Training College—Education section exhibit, 9
Canada:
  Agricultural education:
    Canadian requirements, 159, 160
    Farmers' Institutes, 163
    Government aid, 161, 164
    Newspaper influence, 164
    Travelling dairy schools, 161, 162
  Education system, 293
    School visitors, 294
  Food products, market for, 160, 165
  Pauper children, emigration to, 41, 57
  Toronto University, 295
Cape Colony—Education, 286, 321, 331
Charitable Societies, business training required for workers, 181
Charts and diagrams—Education section exhibits, 5, 8, 10, 11, 12, 13, 14, 15
Cheese-making (see title Dairy work)
Cheltenham College—Education section exhibit, 6, 8, 11, 25
Clapham High School—Education section exhibit, 18, 19, 20
Clerks, &c.:
  Capable women preferred to men, 185
  Salaries, 186

Clothworker' Company—Gold star, award, 23
C hn, Professor:
Myopia, statistics, 114
School desks, construction, 121
Slate and pencil, disadvantages, 119
College Hall—Education section exhibit, 6
Colonies:
Dairy schools needed in, 144
English history, value of teaching, 286
Leighton, Salop, Training Home, 152
Life in, practical education essential, 140, 143
University privileges, equality of the sexes, 300, 314, 331
(For detailed information see names of Colonies)
Convergence, function of, in the eye, 110
Cookery:
Agricultural districts, instructions needed in, 146, 147
Board School centres, 31
Colonial Premier, advice of, 139
Seamen—Education section exhibit, 23
Craigie, Major—Agricultural education, 170

Daffodil-growing in Ireland, 153, 155, 156
Dairy work:
Appliances minimising labour, 129
British Dairy School, 132
Buttermaking:
Australia, 173
Canada, 159, 162
Colonies, instruction needed in, 144
Foreign butter and travelling dairy schools, 143
Ireland, 124, 168
Machinery, 129, 173, 174
Cheese-making, 130, 174
Lucrative employment for qualified women, 133
Training required, 128, 129, 130, 132
Das, Mr.—Education of Indian women, 280
Deaf children:
New Zealand State School, 314
Special Board Schools for, 30
Deane, Miss—Half-timers in factories, 223
Deccan College, Bombay, 244, 245
Desks, school, construction, 120
Diggle, Mr.—Feeble-minded children, 72
Dilke, Lady, and women factory inspectors, 209
Doctors (see title Medical Profession)
Domestic science:
Board School instruction, 31, 70
Cookery (see that title)
Education section exhibit, 23
Drawing—Royal Drawing Society, commendation and awards, 10, 20, 23

Dress-making, &c.:
Agricultural districts, instruction needed in, 146, 147
Education section exhibit, 24
Dufferin Fund for Medical Women, 97, 104
Dunedin, Bishop of, New Zealand Education system, 324
Durham University admitting women to medical examinations, 89, 99
Dutt, Mr.—Civilisation in ancient India, 259

Ear and eye, impressions on, relative strength of, 108
Edinburgh University medical examination open to women, 99
Edmonton Poor Law Schools—Success of former pupils, 58
Education Act, 1870—'Payment by results' system, evils of, 66
Education Department:
Code prescribed by, 29
Revised code, 66
Eggs:
Irish eggs, how to procure market for, 157
London market value, 138
Elementary Schools:
Board Schools (see that title)
Brain power among pupils, statistics, 65
Health in, Mrs. Burgwin on, 68
London children's sight, statistics, 114
Ellaby, Miss—Care of the sight in childhood, 107
Ergograph, effect of brain work on the body tested by, 64
Evening continuation schools, subjects taught in, 31
Examination papers—Education section exhibit, 21
Examinations, Mrs. Garrett Anderson on, 94
Eye and ear, impressions on, relative strength of, 108
Eyes:
Barrack schools, disease in, statistics, 42, 59
Camera obscura, analogy to, 109
Construction and functions, 109, 110
Ophthalmia (see that title)
Sight (see that title)

Fabian Society and women factory inspectors, 206, 207
Factories—Half-timers, 223
Factory Acts:
Blyth, Dr. Wynter, on, 236
Ventilation question, 222, 233
Workshop, definition of, 232
Factory Acts Amendment Bill, 208
Factory inspectors, women:
Bristol Conference of women workers, 209
Deputations to the Home Secretary, 207, 213
Duties and powers, 215, 219, 222
First appointments, 213, 214
France, system in, 216, 225
Labour Commission, evidence, 210
Liberal Federation, Women's, resolution, 208

Factory inspectors, women :—*continued*
Parliamentary attitude, 226
Public prosecutions by, 213, 220, 221, 228
Sanitary authorities, difficulties with, 221
Trades Union Congress, attitude of, 206, 207
Working classes, views of, 205, 208, 211, 226
Fahrner, Professor—Teaching handwriting, 120
Fairy tales and games (see title Games and fairy tales)
Fawcett, Mrs. :
Medical training of women, 85
University extension, 345
Feeble-minded children :
Classification, statistics, 70, 71
Definitions of, 68, 69
Diggle, Mr., on, 72
'Guild of Old Scholars,' 71
Inquiries and recommendations on behalf of, 66
London School Board special classes for, 30, 68, 69
Poor Law Schools for, 58, 67
Fitch, Sir Joshua, and Poor Law Schools, 43
Ford, Miss, and women factory inspectors, 209
Forest Gate Poor Law School, 55
Fowls (see title Poultry-keeping)
France :
Agricultural education, 168
Factory inspection in, 216, 225
Fream, Dr.—Business side of farming, 148
Freer, Miss—Swanley Horticultural College, 152
Froebel Institute—Education section exhibit, 25
Froebel Society—Education section exhibit, 24

Galton, Sir Douglas—Connection between brain work and physical condition of body, 63
Games and fairy tales :
Educational value of, 74, 76
Guild of Play demonstration, 80
Gardening (see title Horticulture)
Garrett Anderson, Mrs.—Medical training of women, 85, 96
Geography—Education section exhibits, 9, 20
Germany—Myopia, statistics, 114
Girls' Public Day schools :
Business training acquired in, 194, 196
Education section exhibit, 11
Sight of pupils, statistics, 115
Girton—Education section exhibit, 2
Gokhle, Professor—Women's education in India, 254
Gomme, Miss—Singing-games, 80, 81
Grace, Sister—Guild of Play, 73
Gradwell, Miss Cecil :
Business training for women, 176
Education section exhibit, 25

Gray, Miss Jessie—Women as sanitary inspectors, 229
Griesbach, Professor—Brain work and nervous system, experiments, 64
Guardians of the poor (see title Poor Law Guardians)
'Guild of Old Scholars,' 71
Guild of Play, 73
Demonstration, 80

Half-timers, 223
Handwork:
Education section exhibits, 20, 23, 25, 26
(See also titles Needlework and Technical education)
Handwriting, teaching, 120, 195
Hanwell Poor Law Schools, 49
Headmistresses' Association—Education section exhibit, 10
Health:
Business women, advice to, 192
National Health Society, 231
High Schools:
Business training acquired in, 194, 196
Education section exhibits, 10
Highbury High School—Education section exhibit, 20
Hill, Dr. Alex., University Extension Conference Chairman, 332, 336, 341, 343, 345, 347, 350, 351
Hobhouse, Lord—Indian education, 238
Hogarth, Miss Janet—Business training for women, 190
Holloway College—Education section exhibit, 7
Honey (see title Bee-keeping)
Hornchurch village community for pauper children, 44, 50
Horticultural College, Swanley, 135, 144, 145, 151, 152
Horticulture:
Branches specially suited to women, 136, 150
Home employment, 135, 136, 145
Ireland, 136, 138, 153, 167
Kew Gardens, training at, 151
Poor Law Schools, 57
Salaried employment, 136, 145
Wycombe Abbey School, classes in, 172
Hughes, Miss, and secondary training colleges, 8
Hutchings, Miss—Horticulture for women, 150
Hygiene—National Health Society Lectures, 231
Hypermetropia, or long sight:
Girls' Public Day schools, London, statistics, 115
London elementary schools, statistics, 115
Symptoms and remedy, 111

Indexing—Miss Nancy Bailey, 196
India:
General education:
Bombay Presidency (see that title)
Caste, probable effect on, 239

India :—*continued*
General education :
Despatch to the Government of, 263, 273
Government policy, 238, 240
Mahomedans resisting, 250
University system, defects, 283
Medical aid for native women, appeal, 101
Medical women :
British and Indian doctors compared, 102
Dufferin Fund, 97, 104
Funds maintaining, 97
Medical schools in India, 99
Pioneers, 97
Statistics, 98
Supply, difficulties of, 100
Training and qualifications essential, 104
Women's Progress :
'Arya Mahila Sama' Society, 271
Bengal, 99, 238, 264, 268, 281
Bombay Presidency (see that title)
Central Provinces, statistics, 268
Education Commission Report, 257, 261, 264, 265, 271
Education, statistics, 267
Educational neglect, dangers, 281
Higher education, obstacles, 267, 274
Hindu women in ancient India, 258, 271
Home Government support, 263, 272, 279
Madras Presidency (see that title)
Mental energies of Indian women, 262
Missionary effort, 262, 264, 265, 280
Mysore School, 272
Natives tolerating education, 269, 276, 282
North-west Provinces, 265, 268, 282
Poona, 266, 271, 272
Poverty preventing, 277, 279
Punjaub schools, 266
School curriculum, difficulties, 268, 274
Social and religious prejudices obstructing, 255, 257, 266, 277, 278, 282
Training colleges for teachers, work of, 268, 275
Women, reverence for, 278, 279
Ireland :
Agricultural education and organisation, 123, 124, 126, 167
Bee-keeping, 138, 169
Butter-making, 124, 168
Horticulture, 136, 138, 153, 167
Markets needed for produce, 155, 170
Poultry-keeping, 156
Recess Committee, work of, 123, 125
University of Ireland granting medical degrees to women, 89, 99

Jardine, Sir John—Education of Indian women, 277
Jephson, Rev. A. W.—Work of London School Board, 27
Joyce, Mrs.—Leighton, Salop, Colonial Training Home, 152

Kay-Shuttleworth, Sir J.:
Pauper children, status of, 47
Poor Law Education reform, 37
Kensington High School—Education section exhibit, 15
Kew Gardens, horticultural training at, 151
Kindergarten room—Education section exhibit, 24
Kindergarten work:
Education section exhibits, 20, 23, 25
Poor Law Schools, educational order, 55

Lady Margaret Hall—Education section exhibit, 3
Lane, Dr. Arbuthnot—Rickets, definition, 69
Laundry inspection by women, Parliamentary attitude, 226
Laundry work:
Board School centres, 31, 70
Education section exhibit, 24
Lawrence, Dr.—Universities and educational organisation, 350
Leavesdon Poor Law School, 50, 56
Leighton, Salop, Colonial Training Home, 152
Letterless method of teaching music, 15
Leytonstone Poor Law School, 50
Liberal Federation, women's—Factory Acts administration, resolution, 208
Lidgett, Miss—Education in Poor Law Schools, 45
Lighting of schoolrooms, 116
Liverpool, East, High School—Education section exhibit, 21
Liverpool Technical College—Education section exhibit, 23
Local Government Board:
Paupers, statistics, 34
Poor Law Schools (see that title)
Loch, Lord—Colonial education, 286, 331
London elementary schools, sight of pupils, statistics, 114
London Institute of Needlework, 20, 287
London Royal Free Hospital School for Women, 99
Education section exhibit, 7
London School Board:
Board schools (see that title)
Education section exhibit, 25
Work of, 27
London School of Medicine for Women (see title London Royal Free Hospital School for Women)
London University, M.D. degree, 88, 89, 99
Examinations, students' powers of passing, 94
Requirements, 91
Lorne, Marquis of—Canadian education, 288
Ludhiana Medical School, 99

Macan, Mr. H.—Rural districts education, 139
Macclesfield High School—Education section exhibit, 21
Mackinder, Mr.— University extension, 351
Madras Presidency:
Education, statistics, 264, 267
Medical College, women admitted to, 99, 100
Magnus, Sir P.—Colonial education systems, 329
Maida Vale High School—Education section exhibit, 21
Manchester High School—Education section exhibit, 21
Manning, Miss—Education of Indian women, 276
Manual training (see titles Handwork and Technical Education)
Maria Grey Training College—Education section exhibit, 8, 25
Marston Green village community, 40
Medical Council, General:
Curriculum of medical schools imposed by, 91
Students' registration, 93
Medical profession:
Capital required for starting in, 96, 97
Income, prospects of, 87, 95
India (see that title)
Qualifications for success in, 87, 93, 94
Medical schools:
Academical year, 93
Curriculum, 91
Examinations, students' powers of passing, 94
Indian colleges, 99
London Royal Free Hospital School for Women, 99
Education section exhibit, 7
Scotch Universities, requirements, 92
Medical training:
Age, suitable, for beginning training, 95, 96
Choice of *route* essential, 88
Fawcett, Mrs., on, 85
Initial difficulties, 86
London University M.D. degree (see that title)
Mixed schools and schools for women only, compared, 89
Schools and examinations open to women, 88, 99
Time required for, 93, 96, 104
Victoria, 331
Mentally defective children (see title Feeble-minded children)
Metropolitan Association for befriending Young Servants, 51:
Industrial Exhibition awards, 56
Missionary societies and Indian schools, 262, 264, 265, 280
Money, management of, training needed for, 180, 183
Montgomery, Miss—University extension, 332
Mosso, Professor—Exhaustion from brain work, experiments, 64
Müller's, George, Orphanage, 49
Music, letterless method of teaching, 15
Myopia, or short sight:
Elementary Schools, London, statistics, 114
Germany, statistics, 114

Myopia:—*continued*
Girls' Public Day schools, London, statistics, 115
Symptoms and causes, 113

NATAL education system, 322
National Health Society, 231
Needlework:
Colonial education, 287, 291, 319
Education section exhibit, 20, 23, 24, 26
Poor Law Schools and 'local' work, 56
Nettleship, Mr.—Eye diseases in Poor Law Schools, statistics, 43, 59
New South Wales:
Education system, 290, 297
Religious instruction after school hours, 292
State children, Lady Windeyer on, 62
Sydney University (see that title)
New Zealand education:
Blind and deaf children, 314
Boarding-out system, 313
Common schools, 309, 310, 318
Religious instruction after school hours, failure of, 328
Cost of, 311
Denominational schools, 313, 317, 329
Illiterate population, statistics, 307
Industrial schools, 313
Maori schools, 312
Minister of Education, powers, 309, 310, 311
Secondary schools, 309, 310, 316
State system, special features, 308, 309, 311, 330
Dunedin's, Bishop of, criticism, 325, 327
University of New Zealand, 309, 310, 314, 324
Newnham—Education section exhibit, 2
Norland Place School—Education section exhibit, 25
North London Collegiate School for Girls—Education section exhibit, 10
Norwood Poor Law Schools, 50
Norwood Proprietary School for Pauper Children, 49
Nottingham High School—Royal Drawing Society award, 20
Nottingham Technical School for Women—Education section exhibit, 24
Nursing—Agricultural districts, instruction needed in, 146, 147

OBJECT lesson illustrations—Education section exhibit, 25
Ontario (see title Canada)
Ophthalmia:
New South Wales Cottage Institution, 62
Poor Law Schools:
Local Government Board order, 58
Statistics, 42, 59
Orpin, Mrs.—Flowers and fowls in Ireland, 153
Owen, Joseph—University extension student at Oxford, 338
Owens College, University extension student winning scholarship, 343

Oxford, Association for promoting education of women in—Education section exhibit, 3
Oxford, Cambridge, London and Victoria joint Boards—Education section exhibit, 7

Paterson, Miss—Half-timers in factories, 224
Paterson, Mrs., and women factory inspectors, 206, 213
Pauper children (see title Poor Law children)
Paupers during the Queen's reign, statistics, 33
Pearson's, Mr. C., views on study of history, 286
Photography, process of, and human eye compared, 109
'Physical Record Book'—Education section exhibit, 21, 22
Physical training, G. P. D. S. Company promoting, 21
Physicians, Royal College of, women excluded from, 89, 99
Pickersgill, Mr., and Poor Law system, 62
Play:
  Guild of play, 73
  Poor Law Schools, 53, 57
  School Board promoting, 32
Plunkett, Mr.:
  Agricultural education, 122
  Teegan, Professor, on, 169
Poole, Miss—Poor Law Schools, evidence before Departmental Committee, 56, 59
Poor Law children:
  Barrack schools system, 38, 41, 52
    Improvements, 52, 60
  Boarding-out system, 38
    London children, difficulty with, 44
    New South Wales, 62
    New Zealand, 313
  Canada, emigration to, 41, 57
  Feeble-minded children—Departmental committee, resolution, 67
  New South Wales, 62
  Pickersgill, Mr., on, 62
  Private benevolence, 49
  Relieving officer, duties, 46
  Scattered homes system, 40
  State Children's Aid Association, 61
  Status of, Sir J. Kay-Shuttleworth on, 47
  Village communities system, 40, 44
  Warwick, Lady, on, 33
  Workhouses, contamination in, 36
Poor Law Commissioners (1834)—Workhouse reform, recommendations, 36, 48
Poor Law Guardians:
  Barrack schools built by, 49
  Birmingham board and village communities, 39
  Boarding-out, attitude towards, 39

Poor Law Guardians:—*continued*
Deserted children, powers respecting, 46
Women guardians, advantages of, 52
Poor Law Reform Act (1834):
Evils of system prior to, 36
Severity in application of, 35
Poor Law Reform Act (1889), 46
Poor Law Reform Act (1894), 61
Poor Law Schools:
Barrack school system (see title Poor Law children)
Building plan altered, 50
Defective children, special schools for, 58, 67
Education standard in, 43, 54, 56
Esprit de corps in, 58
Gardening, 57
Girls' training and later career, statistics, 50, 59
Health in, 42
Metropolitan schools, 49
Ophthalmia (see that title)
Proprietary schools, 49
Recreation, 53, 57
Technical training in, 43, 55, 56
Timehouse, 37
Poultry-keeping, 137
Ireland, 156
Primary education (see title London School Board)
Psycho-physiological science, Sir D. Galton on, 63

Queen's College—Education section exhibit, 4
Queen's reign:
Educational and social statistics, 1837–97, 29
Paupers, statistics, 29, 33

Reed's, Dr., orphan asylums, 49
Reeves, Mr. W. P.—New Zealand education, 307, 330
Rickets, definition, 69
Ridley, Sir M. White—Women laundry inspectors, 226
Ringworm, special schools for pauper children suffering from, 58
Roberts, Dr.—University extension, 343
Robertson, Professor—Canadian agricultural education, 159
Roman Catholic education in the colonies, 292, 293, 313, 317, 329
Rukhmabai, 104
Russell, Mr.—Natal education, 320
Rye, Mrs.—State Children's Aid Association, 61

Sadler, Mr.—University extension, 347
St. Katherine's School, St. Andrews—Education section exhibit, 23
St. Margaret's Clergy Orphan School—Education section exhibit, 23
Sanitary inspectors, women:
Duties, 232

Sanitary inspectors, women :—*continued*
First appointments, 230
Labour Commission Minority Report, 236
Qualifications essential, 231
Salaries, 234
Workroom inspectors, powers, 230
Savings Banks :
Board Schools, 32
New South Wales Government Schools, 292
Scattered homes system for pauper children, 40
Scharlieb, Mrs.—Medical women in India, 97
School Board for London (see title London School Board)
Schools :
Education section exhibits, 10
Horticulture as part of curriculum, 172
Scotch Universities—Medical schools, requirements, 92
Seamen learning cookery—Education section exhibit, 23
Seaside schools for pauper children, 48
Senior, Mrs.,-girls' training in Poor Law Schools, statistics, 50, 59
Sewing (see title Needlework)
Shaw, Rev. Hudson—University extension, 337
Shaw-Lefevre, Miss—Women factory inspectors, resolution, 208
Sheffield High School—Education section exhibit, 21, 22
Sheffield—Scattered homes system for pauper children, 40
Shrewsbury High School—Education section exhibit, 20
Shuttleworth, Dr—Feeble-minded children, definition, 69
Sight:
Field of vision, extent, 108
Good sight, standard, 107
Hypermetropia or 'long sight' (see that title)
Imperfect sight, educational disadvantages of, 107
Myopia or 'shortsight' (see that title)
Piercing sight, instances of, 108
Precautions for preservation of, 116
Sketches illustrating lessons—Education section exhibit, 8, 9
Slates, disadvantage of, 119
Somerville College—Education section exhibit, 3
South African education, 286, 320, 331
Southall Poor Law School, 50
Special schools for pauper children, 58
Special schools of the London School Board, 30, 67
State children (see title Poor Law children)
Stephenson, Dr—Eye diseases in barrack schools, statistics, 42, 59
Stockwell Training College—Education section exhibit, 25
Surgeons, Royal College of, women excluded from, 89, 99
Sutherland, Duchess of—Systematic training, 176
Sutton High School—Education section exhibit, 15
Sutton Poor Law School, 49, 58
Swanley Horticultural College, 135, 144, 145, 151, 152
Sydney University, 291, 298, 300, 301
Women's college in, 304

Technical class room—Education section exhibit, 24
Technical Education:
Best method of conveying, 141
Board School instruction, 31, 70
Education section exhibit, 23
Needlework (see that title)
New South Wales, 291, 330
New Zealand, 319
Poor Law Schools, 43, 56
Wycombe Abbey School, 172
Teegan, Professor—Agricultural education, 166
Telang, Mr.—Indian early marriages and education, 267
Thomas, Mrs. Pheroze—Education of Indian women, 273
Tooting Proprietary School for Pauper Children, 49
Toronto University, 295
Tottenham High School—Education section exhibit, 23
Tout, Professor—University extension, 341
Trades Union Congress and women factory inspectors, 206, 207
Training Colleges for Teachers:
Education section exhibit, 8
India, 268, 275
Transvaal education, 321
Tufnell, Mr.—Poor Law education reform, 37
Type-writing business, training required for, 184
Type-writing—Education section exhibit, 25

Universities and University colleges—Education section exhibits, 2
University Extension:
Education section exhibit, 7
Financial difficulty, 342
Intellectual discipline supplied by, 333, 343
Materialism, protest against, 336
Moral development encouraged by, 334, 346
Origin and aims, 332
Owens College scholarship won by student, 343
Pupil teachers, benefit to, 342
Social intercourse, promotion of, 335, 346
Stimulus required from University authorities, 344
Universities and educational organisation, 347, 350

Vernon, Lady Georgine—Dairy work, &c., 127
Victoria, education in, 286, 331
Village communities for pauper children, 40, 44

Wagner, Dr. Francis—Brain power in elementary schools, statistics, 65, 67
Warwick, Lady:
Agricultural training and organisation, 175
Poor Law children, 33

Wedderburn, Sir W.—Women's education in India, 270
Welsh Universities—Education section exhibit, 4
Westfield College—Education section exhibit, 7
Whyte, Miss, and women factory inspectors, 206, 207
Wimbledon High School—Education section exhibit, 13
Windeyer, Miss—Governess Garnished, experiences as, 169
Windeyer, Lady—State children in New South Wales, 82
Windeyer, Miss—Fancy work in New South Wales, 173
Windeyer, Sir W.—Women's higher education in New South Wales, 295
Women's Help Society—Needlework exhibition, 50
Wood, Sir C., and women's education in India, 270
Workhouses:
Children, evil influence on, 36
Poor Law Act (1834), effect of, 35
Toleration, 18
Working classes and university extension movement, 334, 337, 345
Workshop, definition of, 232
Writing, teaching, 105
Wycombe Abbey School, horticulture at, 172

Zymotic diseases, prevalence of, in barrack schools, 42

Compositor at Darley's Indexing Office, 7 Great College Street, Westminster.

PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
LONDON

00098372

Digitized with financial assistance from
Shri Brihad Bhartiya Samaj
on 11 March, 2020